

## FILE NOTATIONS

Entered in NID File ..... ✓  
Location Map Pinned ..... ✓  
Card Indexed ..... ✓

Checked by Chief .....  
Approval Letter .....  
Disapproval Letter .....

## COMPLETION DATA:

Date Well Completed 1/27/79

Location Inspected .

✓ ... WW..... TA.....

Bond released.

GW..... OS..... PA.....

State or Fee Land .....

## LOGS FILED

✓  
Driller's Log.....

Electric Logs (No.) .....

E..... I..... Dual I Lat..... GR-N..... Micro.....

BHC Sonic GR..... Lat..... MI-L..... Sonic.....

CBLog..... CCLog..... Others.....

data 1st production - 2/8/79

8-5-79 Operations sold to: Narmco, Inc.



NW SE 8

2400 ANACONDA TOWER • 555 SEVENTEENTH STREET • DENVER, COLORADO 80202 • 303-825-6100

September 22, 1978

U. S. Geological Survey  
E. W. Guynn, District Engineer  
8426 Federal Building  
125 South State Street  
Salt Lake City, Utah 84138

Re: Filing NTL-6 and A.P.D. Form 9-331C  
The Anschutz Corporation  
Federal 258 No.1-A  
C NW NW Sec. 5, T.18S, R.24E  
Grand County, Utah

Dear Mr. Guynn:

Enclosed are four copies of our preparation of the NTL-6 program and the A.P.D. Form 9-331C for the above captioned well location. One of these copies is to be forwarded to the BLM at Moab, Utah.

Would you kindly set a time with the BLM to go on ground to inspect the well site and notify us accordingly? I will be available for pre-drill inspection when you advise us.

An archaeological report is not included with the NTL-6 report, because this replacement well is staked within 200' of the existing hole. Please inform me if an additional survey is required.

We will appreciate your earliest attention on the above matter.

Please return the enclosed fourth copy to our office with approval and comments.

Very truly yours,

Peter B. Doty  
Production Coordinator

PBD:kg  
Enclosures:

cc: State of Utah ✓  
Division of Oil & Gas & Mining

TABLE I

ESTIMATED IMPORTANT GEOLOGIC MARKERS

<u>FORMATION</u>	<u>DEPTH</u>	<u>ELEVATION</u>
Mancos Shale	Surface	+5208
Dakota Sand	3610'	+1598
Cedar Mountain	3700'	+1508

EXHIBIT "B"

TEN-POINT COMPLIANCE PROGRAM  
OF NTL-6 APPROVAL OF OPERATIONS  
THE ANSCHUTZ CORPORATION

#1A - FEDERAL - 258  
1765' FEL - 1709' FSL  
SEC. 5, T.18S, R.24E

1. The Geologic Surface Formation

This well is situated on the northwestern edge of the Grand Valley. The surface consists of alluvial and colluvial deposits derived from the sedimentary formations which form the steep faces of the Book Cliffs. The surface formation is the dark gray Mancos Shale and the Cliffs are formed from resistant Cretaceous and Tertiary sandstones.

2. Estimated Important Geologic Markers

See Table I.

3. Estimated Depths of Anticipated Water, Oil, Gas or Minerals

The Dakota formation, at approximately 3610' Depth, is expected to produce oil.

4. The Proposed Casing Program

The casing program for this well follows. 2500 feet of 8-5/8" new K-55, 24# casing will be set in a 12-1/4" surface hole. This will be set with 180 sacks of Class G cement with return flow to the surface.

In the event of production, 4-1/2", 9.5# production casing in a 7-7/8" hole at T.D. will be set. This will be set with 200 sacks of 50-50 Posmix with 2% gel and 2% CaCl<sub>2</sub>.

5. The Operator's Minimum Specifications for Pressure Control

Exhibit "C" is a schematic diagram of the blowout preventer equipment planned for use in this well. The BOP's will be hydraulically tested to the full working pressure after nipping up and after any use under pressure. Pipe rams will be operationally checked each 24 hour period. The blind rams and annular preventer will be checked each time pipe is pulled out of the hole. All testings will be recorded in the daily drill sheets. Accessories to BOP's include upper and lower kelly cock, floor safety valve, drill string BOP and choke manifold with pressure rating equivalent to the BOP stack.

6. The Type and Characteristics of Proposed Muds

- (a) It is planned that this well will be drilled with air from the base of the surface casing to the total depth. If air is abandoned, then (b) and (c) will be used.
- (b) If air drilling is abandoned, then the hole will be drilled with native muds to 4000'.
- (c) From 4000' to TD the hole will be drilled with Chem-Gel with the mud weighted as necessary for good hole conditions. The water loss will be kept from 8 to 12cc and the viscosity between 35 and 45.

7. The Auxilliary Equipment to be Used

- (a) A kelly cock will be kept in the string at all times.
- (b) A float will be used at the bit at all times.
- (c) A stabbing valve will be on the floor to be stabbed into the drill pipe when kelly cock is not in the string.

8. The Testing, Logging, and Coring Programs

- (a) All valid shows will be tested. The objective for this well is the Salt Wash Formation.
- (b) If air drilled, an induction log will be run from TD to the base of the surface casing and gamma ray, compensated formation density, and sidewall neutron porosity logs will be run at the minimum footage. If the hole is fluid filled, a dual induction log will be run from TD to the base of the surface casing and gamma ray, compensated formation density, and compensated neutron logs will run at the minimum footage.
- (c) No coring is anticipated.

9. Any Anticipated Abnormal Pressures or Temperatures Expected

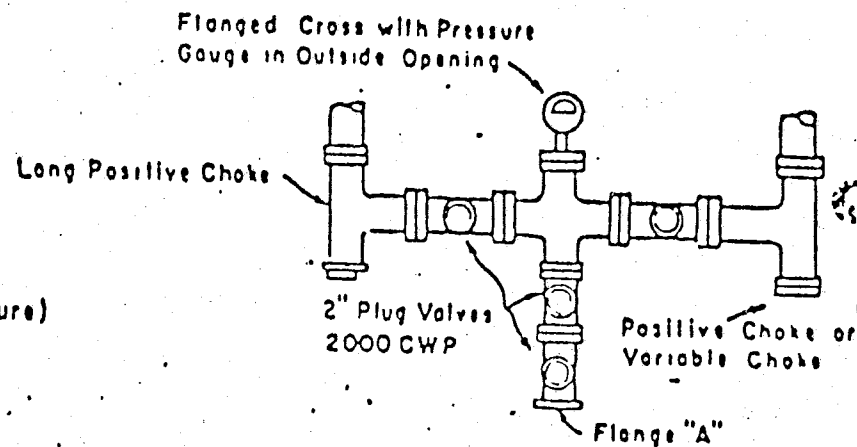
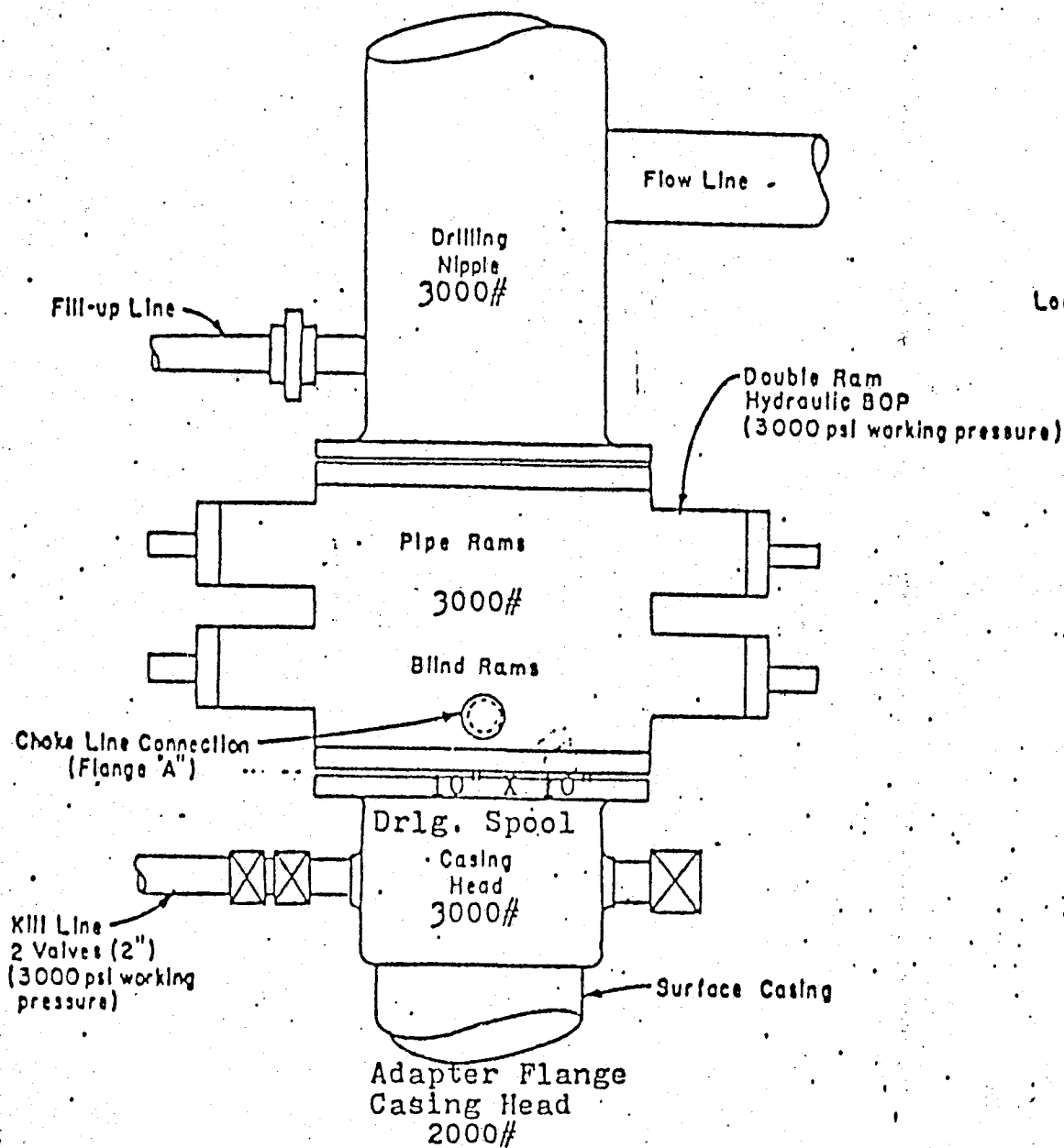
No abnormal pressures or temperatures have been noted or reported in the wells drilled in this area to these depths. No hydrogen sulphide or other hazardous gases or fluids have been found reported or known to exist at these depths in this area.

10. The Anticipated Starting Date and Duration of Operations

The anticipated starting date is set for November 1, 1978, or as soon as possible after examination of the surface and approval of drilling requirements.

It is anticipated that the well should be completed within 30 days after spudding.

# Rotating Head



**PLAN VIEW - CHOKE MANIFOLD**

Blowout Preventer Diagram  
 Anschutz Corporation  
 EXHIBIT "C"

EXHIBIT "D"

MULTIPOINT REQUIREMENTS TO ACCOMPANY APD  
ATTACHED TO FORM 9-331C  
THE ANSCHUTZ CORPORATION

#1A - FEDERAL - 258  
1765' FEL - 1709' FSL  
SEC. 5, T.18S, R.24E

1. Existing Roads

- A. EXHIBIT "A", is the proposed well site as staked by Uintah Engineering and Land Surveying, and the ground elevation is shown thereon.
- B. EXHIBIT "E" is a color coded map used because general features show more prominently than other maps found. One travels 40 miles on I-70 from Thompson, Utah, east to the Harley Dome exit, then proceeds north and east on U.S. 6 and 50. At the Westwater Unit turnoff, it is approximately 11 miles northwest on gravel and dirt road to the location. This location is within 1,000 feet of this road, which can be used in most weather conditions. The blue color in Exhibit "E" indicates this good, passable road.
- C. EXHIBIT "E" shows the existing usable roads in blue. No new roads are anticipated.
- D. This is not an exploratory well.
- E. All known roads in the area are shown in EXHIBIT "E". Generally, all roads are gravel or hard packed dirt.
- F. There is no plan to improve or maintain existing roads.

2. Planned Access Roads

There are no new access roads planned. Use of the existing road to the #1 Federal 258 is anticipated.

(1) NA, (2) NA, (3) NA, (4) NA, (5) NA, (6) NA, (7) NA, (8) NA

3. Location of Existing Wells

A one mile radius from each of the proposed development wells is indicated in EXHIBIT "E". All known wells and their current status are indicated thereon.

(1) No known water wells exist in the area.



3. Location of Existing Wells - Cont'd

- (2) EXHIBIT "E" shows all known wells in the area. The closest dry hole is in the SE 1/4 of the NE 1/4, Section 5, T.18S, R.24E.
- (3), (4), (5) There are no known temporarily abandoned disposal or drilling wells in the area.
- (6) The only producing well in this area is the Anschutz Corporation's well #2-Fed-258, as shown in EXHIBIT "E".
- (7), (8), (9). There are no known shut-in, injection, or observation wells in this area.

4. Location of Existing and/or Proposed Facilities

Existing facilities are shown on EXHIBIT "G". At present we do not anticipate having to move any of the production equipment with the possible exception of the pumping unit.

An existing oil flow line from #2-Federal 258 is shown on EXHIBIT "E" in green.

Additional surface disturbance is shown in red on EXHIBIT "G".

5. Location and Type of Water Supply

Water, if needed, will be obtained from flowing water in Westwater Creek.

6. Construction Materials

A,B,C,D. No construction materials are needed for drilling operations. The sand, gravel and rock located in situ are adequate for any construction necessary in connection with either dry or producing wells. There are no access routes needed for crossing Indian land. No new access roads or upgrading of present roads on Federal lands is anticipated.

7. Handling Waste Disposals

- (1) Drill cuttings will be buried in the reserve pit when covered.
- (2) Drilling fluids will also be handled in the reserve pit.
- (3) Any fluids produced while drill stem testing or producing or other testing will be collected in a test tank set near the pipe baskets or near the well head. Any unavoidable spills of oil or other adverse substances or materials will be covered or removed immediately during drilling progress or during completion operations.
- (4) Any sewage will be covered or removed.

## 7. Handling Waste Disposals - Cont'd

- (5) Garbage, wastes and non-flammable wastes, salts and other chemicals produced or used during drilling or testing will be handled in the reserve pit or kept in the trash or burn pit. The trash or burn pit will be covered with small wire mesh to prevent scattering.
- (6) The reserve pit, in addition to the trash or burn pit, will be fenced on three sides during drilling operations, and iron or other posts and wire fencing will be available on each location immediately upon cessation of drilling and the fourth side of the reserve pit will be fenced prior to full removal of the rig from the location. Any other dangerous or harmful pits or sewage areas will also be fenced or covered at the time rig moved off location. The location will be policed and cleaned up, and rehabilitation of unused areas will be done after the drilling or completion rig has moved off.

## 8. Ancillary Facilities

No airstrips, camps, or other living facilities will be built or needed.

## 9. Well Site Layout

- (1) EXHIBIT "F", is the drill pad layout as staked by Uintah Engineering and Land Surveying. The cut and fill cross sections for the location is designated by STA. 0 + 00, STA. 1 + 10, and STA. 2 + 35. The location has been constructed from these contours. The top 6 inches of soil will be stockpiled as shown on the plat.
- (2) The mud tanks, pits, rig orientation, etc. for this well are shown in EXHIBIT "F". If this well is drilled by air, these facilities may change accordingly.
- (3) EXHIBIT "G", shows the present facility orientation, parking areas and access road for the location. Rig orientation is shown in EXHIBIT "F".
- (4) The reserve pit will be lined with Bentonite. Steel mud pits, if used, will be as shown in EXHIBIT "F".

## 10. Plans for Restoration

- (1) Backfilling, leveling and contouring will be accomplished as soon as possible after plugging of the well, or immediately on those areas unused if production is obtained. Waste disposal and spoils materials will be buried or hauled away immediately before rig moves off location.
- (2) Rehabilitation will be accomplished by spreading the banked topsoil over the area and contouring the banks

10. Plans for Restoration - Cont'd

that will be created in this heavily eroded area so that vegetation planted will be best protected from erosion. Revegetation will be accomplished using grasses or mixtures suited best for the dry, arid conditions encountered here. The access roads will be revegetated as needed.

- (3) Prior to rig release, the fourth side of the reserve pit at each drill site will be fenced and maintained until clean up operations are finished.
- (4) Any oil or spills will be immediately cleaned up or flagged.
- (5) Rehabilitation operations will commence as soon as the rig moves off location. However, revegetation will be delayed until the Spring of 1979 or the Fall of 1979 for optimum growth potential.

11. Other Information

This replacement well is located on the northwestern edge of the Grand Valley at the foot of the Book Cliffs. The topography of the immediate area grades from flat prairie to gullied hills, steeping with increasing proximity to the Cliffs. Long, narrow canyons, the majority of which carry only intermittent stream flow, form the chief topographic features of the Book Cliffs. This area receives very little annual precipitation; however, as this area is located at the mouth of Hay Canyon, it is subject to flash flooding.

The canyon bottoms and adjacent flatlands are composed predominantly of alluvial and colluvial material consisting of poorly sorted boulders, gravel, sand and silt. The soil on all locations is a sandy, silty clay formed from this material and is primarily derived from the Cretaceous Mancos Shale and the resistant Cretaceous and Tertiary sands forming the cliffs (refer to Item 1 of Exhibit "B").

The Flora at this location consists of sagebrush, tumbleweed, cactus, bunch grass and other sparse grasses, and occasionally Pinyon Pine and Juniper. The vegetation constitutes approximately 40-70% of the ground cover. The remaining exposed soil material is highly erodible. The observed animal population is domesticated sheep and cattle and a few deer, rabbits, snakes and lizards. Other wildlife indigenous to a rugged, semiarid environment is presumed to exist.

11. Other Information - Cont'd

(2) Grazing is the only observed current surface use in this area. The location for #4 Federal 258 adjoins an abandoned ranch which at one time supported cultivated crops. The surface ownership is by Frank Spadafore of Montrose, Colorado, and BLM.

(3) These locations are close to a small intermittent stream, as can be seen on the topographic map reproduced in EXHIBIT "E". However, this location should be far enough from the stream that there will be no danger of contamination from seepage from the reserve pit, and any runoff of oil or chemicals from the drill site will not be permitted (refer to Item 7 above).

It is not anticipated that an archeological survey will be required for this offset location. The original clearance for the #1 Federal 258 should suffice.

The commencement of operations is planned for approximately November 1, 1978, or as soon as possible after approval.

12. Lessee's or Operator's Representative

Peter B. Doty  
Production Coordinator  
The Anschutz Corporation  
555 17th Street  
2400 Anaconda Tower  
Denver, Colorado 80202

Phone: (303) 825-6100  
Res: (303) 427-2873

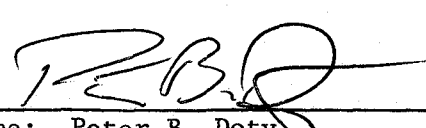
Wayne C. Pierce  
Operations Manager  
The Anschutz Corporation  
555 17th Street  
2400 Anaconda Tower  
Denver, Colorado 80202

Phone: (303) 825-6100  
Res: (303) 794-3860

13. Certification

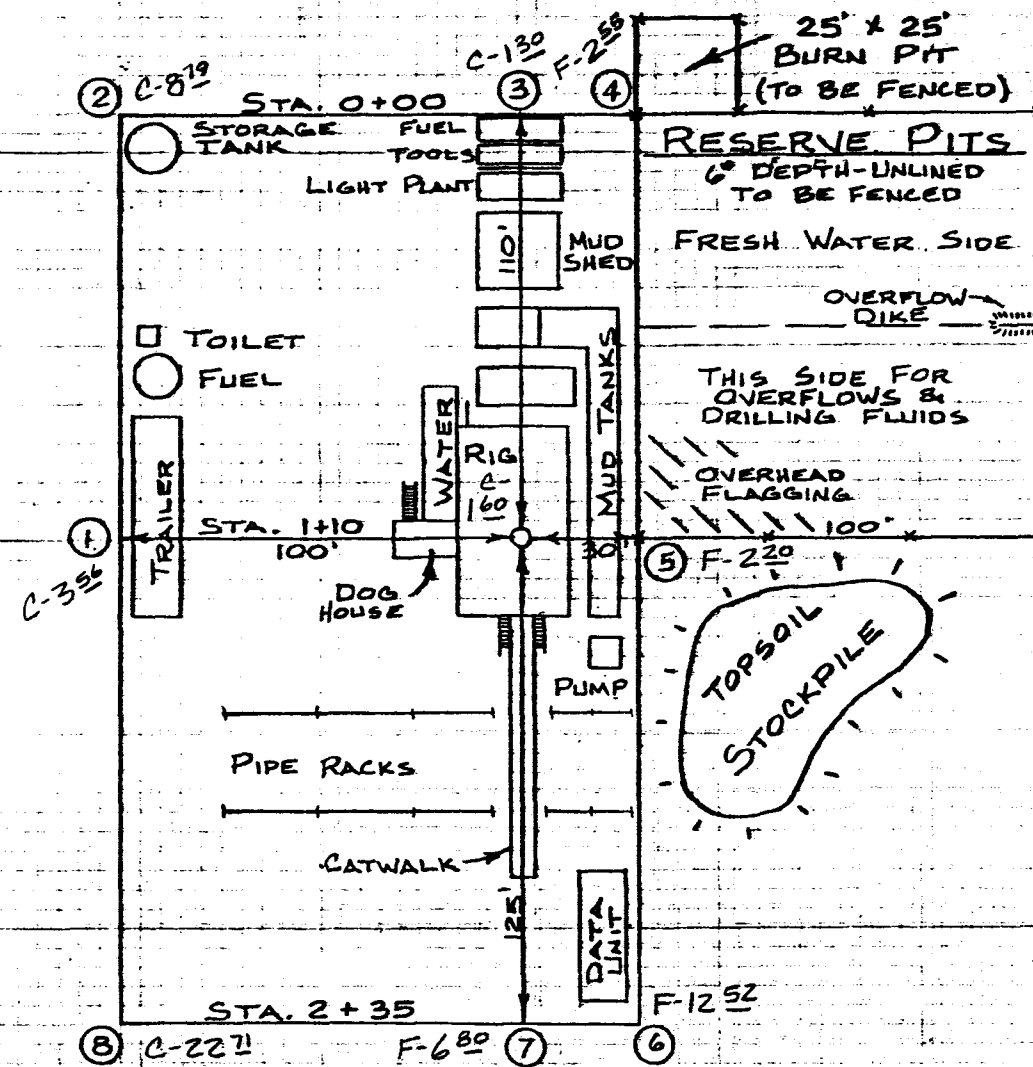
I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by The Anschutz Corporation and its contractors and sub-contractors in conformity with this plan and their terms and conditions under which it is approved.

Date: 9-22-78

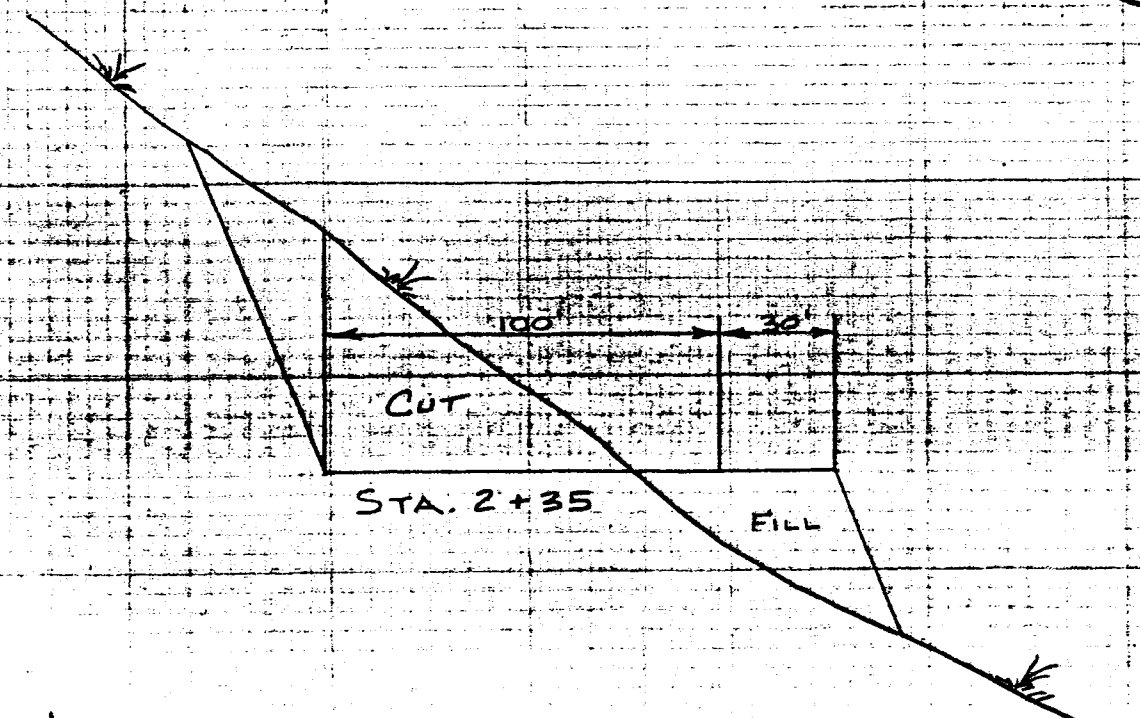
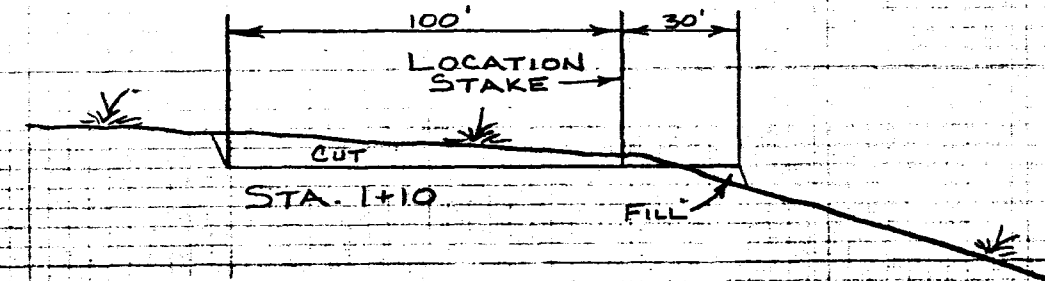
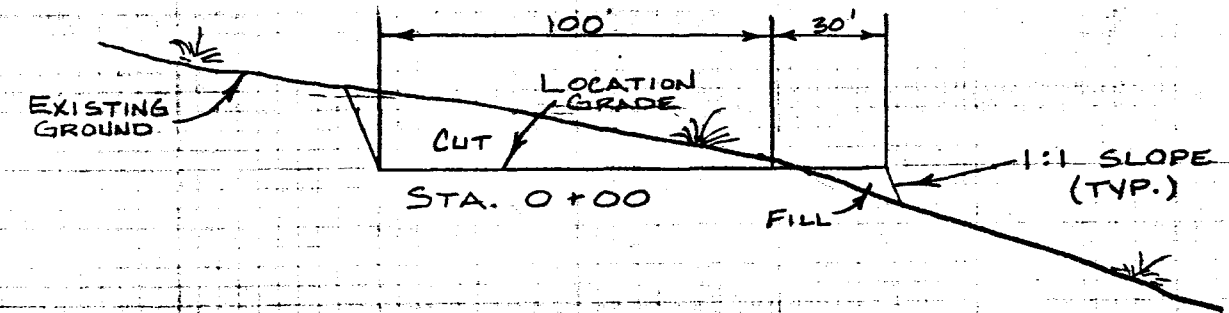
  
Name: Peter B. Doty  
Title: Production Coordinator  
The Anschutz Corporation

ANSCHUTZ CORP.

FEDERAL 258 #1-A  
LOCATION LAYOUT SHEET



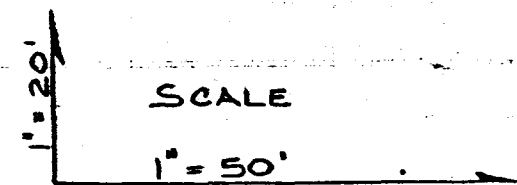
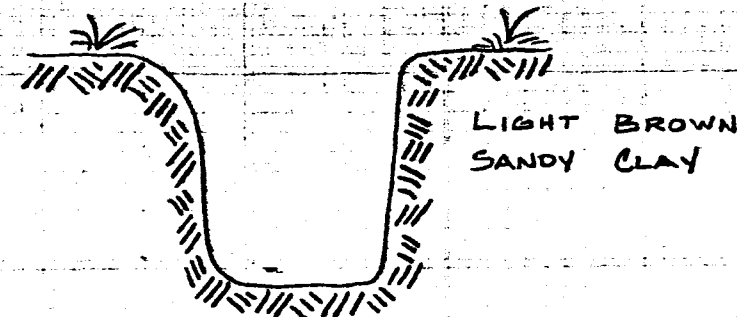
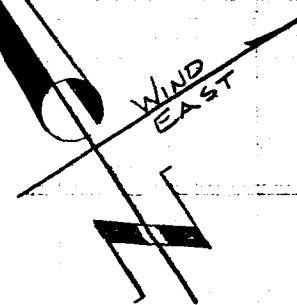
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SOILS LITHOLOGY

- NO SCALE -

SCALE - 1" = 50'



APPROX. YARDAGES

CUT - 5,218 Cu. Yds.

FILL - 1,233 Cu. Yds.

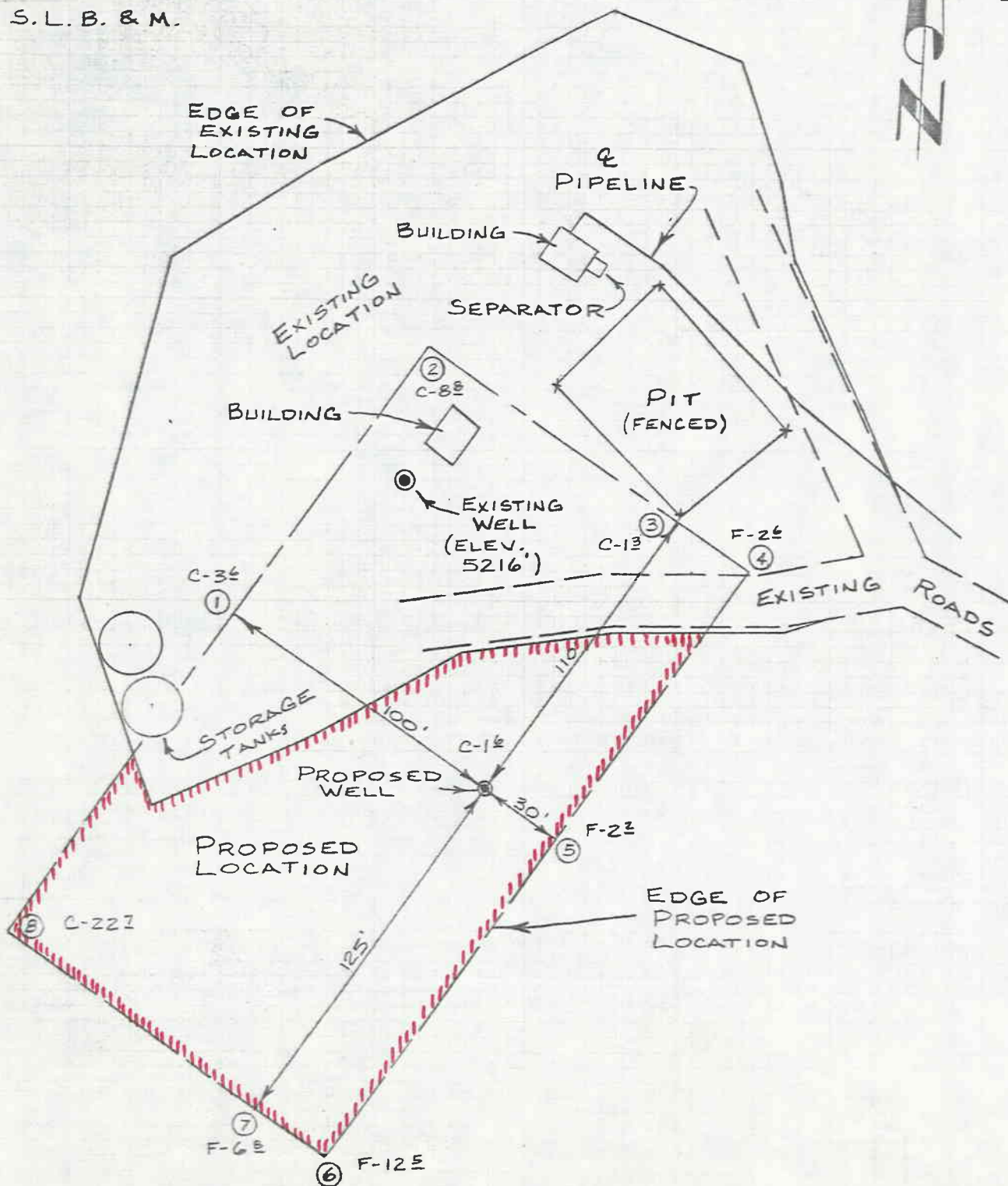
EXHIBIT "F"

# ANSCHUTZ CORP.

EXHIBIT "G"  
LAYOUT OF EXISTING LOCATION  
(FEDERAL 258 #1)  
AND  
PROPOSED LOCATION  
(FEDERAL 258 #1-A)

SECTION 5,  
T18S,  
R24E,  
S.L.B. & M.

SCALE - 1" = 50'



STATE OF UTAH  
DIVISION OF OIL, GAS, AND MINING

\*\* FILE NOTATIONS \*\*

Date: Sept. 26, 1978  
Operator: Tepoma Production  
Well No: Federal 258 No #1A  
Location: Sec. 5 T. 18S R. 24E County: Monte Verde

File Prepared: ☐

Entered on N.I.D.: ☐

Card Indexed: ☐

Completion Sheet: ☐

API Number: 43-019-30469

CHECKED BY:

Administrative Assistant: AW

Remarks: OK

Petroleum Engineer: OK

Remarks: OK

Director: J

Remarks: OK

INCLUDE WITHIN APPROVAL LETTER:

Bond Required: ☐

Survey Plat Required: ☐

Order No. \_\_\_\_\_

Surface Casing Change ☐  
to \_\_\_\_\_

Rule C-3(c), Topographic exception/company owns or controls acreage  
within a 660' radius of proposed site ☐

O.K. Rule C-3 ☒

O.K. In \_\_\_\_\_ Unit

Other:

~~Approval is contingent upon not  
attempting to change location approved by~~

☒ Letter Written/Approved

~~This letter~~



2400 ANACONDA TOWER • 555 SEVENTEENTH STREET • DENVER, COLORADO 80202 • 303-825-6100

October 2, 1978

Mr. Edgar Guynn  
District Engineer  
U. S. Geological Survey  
8440 Federal Building  
Salt Lake City, Utah 84138

Re: Federal 258 No. 1-A  
NW, SE, Sec. 5, T.18S-R.24E  
Grand County, Utah

Dear Mr. Guynn:

In submitting the Application For Permit to Drill the referenced location, I find I neglected to include the Rehabilitation Agreement.

Enclosed please find the Agreement executed by me.

If you have any questions, please do not hesitate to call.

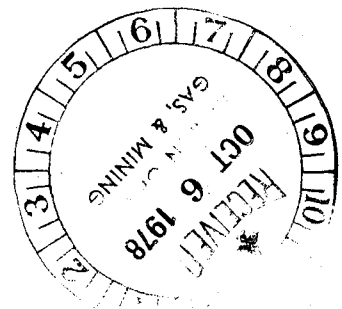
Thank you.

Sincerely,

Peter B. Doty  
Production Coordinator

PBD/mle  
Enclosures:

cc: *Utah Division of Oil, Gas, Mining*





REHABILITATION AGREEMENT

Lease No.: U-14258; Well Name and No.: Federal 258 No. 1-A;

Location: NW 1/4 SE 1/4 Section 5, T. 18S, R. 24E.

The Anschutz Corporation intends to drill a well on surface owned by Mr. Frank Spadafore. The lessee/operator agrees to complete the following rehabilitation work if the well is a producer:

☒ Yes ☐ No Maintain access road and provide adequate drainage to road.

☒ Yes ☐ No Reshape and reseed any disturbed area in excess of the pump and support facilities.

Other requirements: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

The following work will be completed when the well is abandoned:

☒ Yes ☐ No Site will require reshaping to conform to existing topography.

☒ Yes ☐ No Pit will be fenced until dry, then filled to conform to topography.

☒ Yes ☐ No Entire disturbed area will be reseeded. If yes, the following seed mixture will be used:

<u>Indian Rice Grass 1.5 lb/acre</u>	<u>Globemallow 1 lb/acre</u>
<u>Sand Drop 1.5 lb/acre</u>	<u>Shadscale 1 lb/acre</u>
<u>Four Wing Slat Bush 1 lb/acre</u>	_____

☒ Yes ☐ No Access road will be rehabilitated and reseeded using the same seed mixture as above.

☐ Yes ☒ No Access road will remain for landowner's use.

Other requirements: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Landowner

Name: Frank Spadafore  
Address: Spadafore Ranch  
City: Montrose  
State: Colorado  
Telephone: (303) 249-9745  
Date: September 29, 1978

Operator/Lessee

Name: The Anschutz Corporation  
Address: 555-17th Street, 2400  
City: Denver  
State: Colorado  
Telephone: (303) 825-6100  
Date: September 29, 1978

☒ Yes ☐ No I certify rehabilitation has been discussed with the surface owner. Peter B. Doty

This agreement covers rehabilitation requirements only and does not affect any other agreements between the lessee/operator and surface owner.

SCOTT M. MATHESON  
Governor



OIL, GAS, AND MINING BOARD

GORDON E. HARMSTON  
*Executive Director,*  
NATURAL RESOURCES

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS, AND MINING  
1588 West North Temple  
Salt Lake City, Utah 84116  
(801) 533-5771

CLEON B. FEIGHT  
*Director*

I. DANIEL STEWART  
*Chairman*

CHARLES R. HENDERSON  
JOHN L. BELL  
THADIS W. BOX  
C. RAY JUVELIN

October 16, 1978

The Anschutz Corporation  
555 - 17th Street  
Suite 2400  
Denver, Colorado 80202

Re: Well No. Federal 258-#1-A  
Sec. 5, T. 18 S, R. 24 E,  
Grand County, Utah

Gentlemen:

Insofar as this office is concerned, approval to drill the above referred to well is hereby granted in accordance with Rule C-3, General Rules and Regulations and Rules of Practice and Procedure.

Should you determine that it will be necessary to plug and abandon this well, you are hereby requested to immediately notify the following:

PATRICK L. DRISCOLL - Chief Petroleum Engineer  
HOME: 582-7247  
OFFICE: 533-5771

Enclosed please find Form OGC-8-X, which is to be completed whether or not water sands (aquifers) are encountered during drilling.

Further, it is requested that this Division be notified within 24 hours after drilling operations commence, and that the drilling contractor and rig number be identified.

The API number assigned to this well is 43-019-30469.

Very truly yours,

DIVISION OF OIL, GAS, AND MINING

CLEON B. FEIGHT  
Director

cc: U.S. Geological Survey

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK

DRILL ☒

DEEPEN ☐

PLUG BACK ☐

b. TYPE OF WELL

OIL  
WELL ☒

GAS  
WELL ☐

OTHER ☐

2. NAME OF OPERATOR

The Anschutz Corporation

3. ADDRESS OF OPERATOR

555 17th Street, Suite 2400, Denver, CO 80202

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)\*

At surface

1765' FEL 1709' FSL

At proposed prod. zone

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*

Approx. 8 miles N.W. of Harley Dome, Utah

15. DISTANCE FROM PROPOSED\*

LOCATION TO NEAREST  
PROPERTY OR LEASE LINE, FT.  
(Also to nearest drlg. unit line, if any)

1709

16. NO. OF ACRES IN LEASE

17. NO. OF ACRES ASSIGNED

TO THIS WELL

80

18. DISTANCE FROM PROPOSED LOCATION\*

TO NEAREST WELL, DRILLING, COMPLETED,  
OR APPLIED FOR, ON THIS LEASE, FT.

98.6'

19. PROPOSED DEPTH

4500

20. ROTARY OR CABLE TOOLS

Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)

5208' GR 5218' KB (Est)

22. APPROX. DATE WORK WILL START\*

November 1, 1978

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	8-5/8"	24.0#	250'	Circ. to surf. ( $\pm$ 150 sx)
6-3/4"	4-1/2"	9.5#	4500'	200 sx.

Exhibits Attached:

- "A" Location and Elevation Plat
- "B" The Ten point Compliance Program
- "C" Blow-Out Preventer Diagram
- "D" Multi-Point Requirement
- "E" Area Access Road and Well Map

- "F" Drill Pad Layout, Cut and Fill Sections
- "G" Existing Facility Layout and Proposed Pad Extension

It is planned to drill this well through the Dakota Formation as a replacement for the Federal 258 No. 1. This well will be air drilled, mudding up if necessary. Gas zones encountered will be checked for volume through 2" lines off the casing head after the pipe rams have been closed. The blooie line of at least 100' in length will extend from the rotating head into the reserve pit. A flare will be maintained at the end of the blooie line at all times while drilling below 1000'. In the event of commercial production, 4 1/2" casing cemented 250' above the top of the Dakota formation.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

SIGNED

*Peter B. Doty*  
Peter B. Doty

TITLE

Production Coordinator

DATE

September 21, 1978

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

*W. J. Martin*

TITLE

ACTING DISTRICT ENGINEER

DATE

NOV 15 1978

CONDITIONS OF APPROVAL, IF ANY:

\*See Instructions On Reverse Side

STATE-DOGM  
File

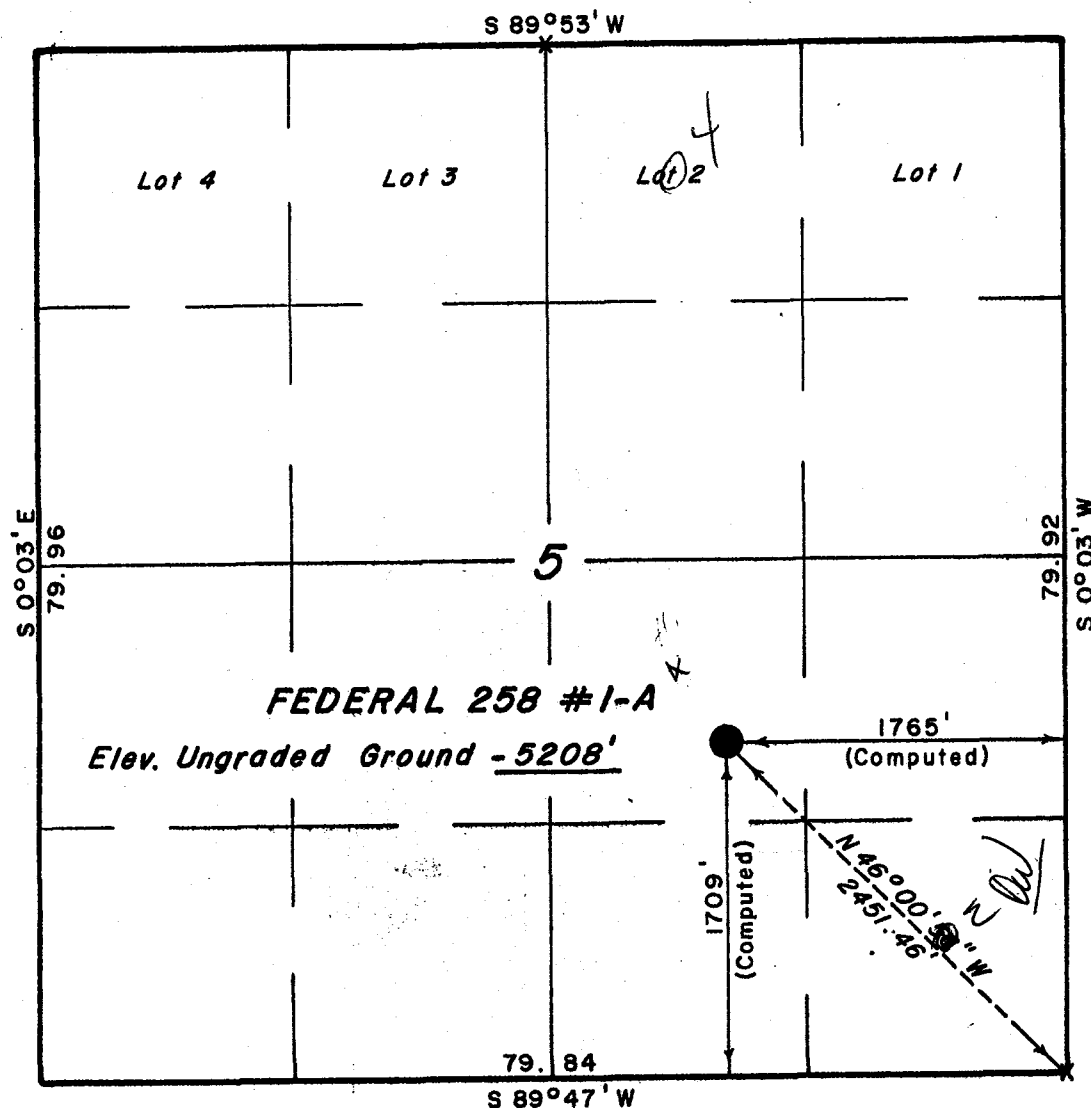
PROJECT

**ANSCHUTZ CORP.**

Well location, **FEDERAL 258 #1-A**, located as shown in the NW 1/4 SE 1/4 Section 5, T18S, R24E, S.L.B. & M. Grand County, Utah.

**T18S, R24E, S.L.B. & M.**

EXHIBIT "A"



X = Section Corners Located



**CERTIFICATE**

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

*[Signature]*  
REGISTERED LAND SURVEYOR  
REGISTRATION NO 2454  
STATE OF UTAH

**UINTAH ENGINEERING & LAND SURVEYING**  
P. O. BOX Q - 110 EAST - FIRST SOUTH  
VERNAL, UTAH - 84078

SCALE	1" = 1000'	DATE	9/7/78
PARTY	DA JB DJ	REFERENCES	GLO Plat
WEATHER	Fair	FILE	ANSCHUTZ CORP.

Oil and Gas Drilling

EA No. 1412

United States Department of the Interior  
Geological Survey  
8440 Federal Building  
Salt Lake City, Utah 84138

Usual Environmental Analysis

Lease No. U14258

Operator The Anschutz Corporation

Well No. 1-A Federal 258

Location NW $\frac{1}{4}$  SE $\frac{1}{4}$  Sec. 5 T. 18 S. R. 24 E.

County Grand State Utah Field Undesignated

Status: Surface Ownership Private Minerals Federal

Joint Field Inspection Date October 24, 1978

Participants and Organizations:

Rocky Curnutt

BLM - Moab, Utah

Pete Doty

The Anschutz Corp., Coordinator

Mike Brown

Reseeding Reclamation Contractor

Chuck Zimmerman

Dirt Contractor

Ray Foster

USGS

Related Environmental Analyses and References:

- (1) Unit Resource Analysis  
Book Mountain Planning Unit (06-01) BLM, Moab.
- (2)

Analysis Prepared by: Ray Foster  
Environmental Scientist  
Salt Lake City, Utah

Date October 24, 1978

Noted - G. Diwachak

Reviewed by:  
George Diwachak  
Environmental Scientist  
Salt Lake City, Utah

*Pad 130 x 235  
Pit 100 x 110  
No new access  
Prod loc @ #1 well  
100' to NW  
Stockpile top soil  
1 ac*

STATE

Proposed Action:

On September 25, 1978, the Anschutz Corporation filed an Application for Permit to Drill the No. 1-A Federal 258 replacement well for the No. 1, a 4500-foot oil test of the Summerville formation; located at an elevation of 5140 ft. in the NW $\frac{1}{4}$  SE $\frac{1}{4}$  Sec. 5, T. 18 S., R. 24 E., on Federal mineral lands and private surface; lease No. U14258. There was no objection raised to the wellsite nor to the access road.

A rotary rig would be used for the drilling. An adequate casing and cementing program is proposed. Fresh-water sands and other mineral-bearing formations would be protected. A Blowout Preventor would be used during the drilling of the well. The proposed pressure rating should be adequate. Details of the operator's NTL-6 10-Point Sub-surface and 13-Point Surface Protection Plans are on file in the U.S.G.S. District Office in Salt Lake City, Utah and the U.S.G.S. Northern Rocky Mountain Area Office in Casper, Wyoming.

A working agreement has been reached with the controlling surface owner.

The operator proposes to construct a drill pad 130 ft. wide x 235 ft. long, of which about half will overlap onto an existing pad, and a reserve pit 100 ft., x 110 ft. No new access road would be constructed. The operator proposes to use existing production facilities at the No. 1 well located 100 ft. to the northwest (junked and abandoned).

The anticipated starting date is upon approval and duration of drilling activities would be about 30 days.

Location and Natural Setting:

The proposed drillsite is approximately 25 miles northwest of Mack, Colorado, the nearest town. A fair road runs up to the location. This well is in an undesignated field.

Topography:

Rugged terrain of dissected hills with narrow canyons. Site is located on west side of canyon cut by erosional gullies.

Geology:

The surface geology is Mancos shale. The soil is sand with sandstone fragments. No geologic hazards are known near the drillsite. Seismic risk for the area is minor. Anticipated geologic tops are filed with the 10-Point Subsurface Protection Plan.

Approval of the proposed action would be conditioned that adequate and sufficient electric/radioactive/density logging surveys would be made to locate and identify any potential mineral resources. Production casing and cementing would be adjusted to assure no influence of the hydrocarbon zones through the well bore on these minerals. In the event the well is abandoned, cement plugs would be placed with drilling fluid in the hole to assure protection of any mineral resources.

The potential for loss of circulation would exist. Loss of circulation may result in the lowering of the mud levels, which might permit exposed upper formations to blowout or to cause formation to slough and stick to drill pipe. A loss of circulation would result in contamination due to the introduction of drilling muds, mud chemicals, filler materials, and water deep in to the permeable zone, fissures, fractures, and caverns within the formation in which fluid loss is occurring. The use of special drilling techniques, drilling muds, and lost circulation materials may be effective in controlling lost circulation. Operator proposes to use air drilling methods which would eliminate lost circulation problems.

A geologic review of the proposed action has been furnished by the Area Geologist, U.S. Geological Survey, Salt Lake City, Utah.

The operator's drilling, cementing, casing and blowout prevention programs have been reviewed by the Geological Survey engineers and determined to be adequate.

#### Soils:

No detailed soil survey has been made of the project area. The top soils in the area range from a sandy clay to a clay type soil. The soil is subject to runoff from rainfall and has a high runoff potential and sediment production would be high. The soils are mildly to moderately alkaline and support the salt-desert shrub community. The piñon, juniper association is also present.

Top soil would be removed from the surface and stockpiled. The soil would be spread over the surface of disturbed areas when abandoned to aid in rehabilitation of the surface. Rehabilitation is necessary to prevent erosion and encroachment of undesired species on the disturbed areas. The operator proposes to rehabilitate the location and access roads per the recommendations of the Bureau of Land Management.

Approximately 1 acre of land would be stripped of vegetation. This would increase the erosional potential. Proper construction practice, construction of water bars, reseeding of slope-cut area would minimize this impact.

Air:

No specific data on air quality is available at the proposed location. There would be a minor increase in air pollution due to emissions from rig and support traffic engines. Particulate matter would increase due to dust from travel over unpaved dirt roads. The potential for increased air pollution due to leaks, spills, and fire would be possible.

Relatively heavy traffic would be anticipated during the drilling-operations phase, increasing dust levels and exhaust pollutants in the area. If the well was to be completed for production, traffic would be reduced substantially to a maintenance schedule with a corresponding decrease of dust levels and exhaust pollutants to minor levels. If the project results in a dry hole, all operations and impact from vehicular traffic would cease after abandonment. Due to the limited number of service vehicles and limited time span of their operation, the air quality would not be substantially reduced.

Toxic or noxious gases would not be anticipated.

Precipitation:

Annual rain fall should range from about 8 to 11" at the proposed location. The majority of the numerous drainages in the surrounding area are of a non-perennial nature flowing only during early spring runoff and during extremely heavy rain storms. This type of storm is rather uncommon as the normal annual precipitation is around 8".

Winds are medium and gusty, occurring predominately from west to east. Air mass inversions are rare. The climate is semi-arid with abundant sunshine, hot summers and cold winters with temperature variations on a daily and seasonal basis.

Surface Water Hydrology:

Drainage is to the north into Westwater Creek, a tributary of the Colorado River.

Some additional erosion would be expected in the area since surface vegetation would be removed. If erosion became serious, drainage systems such as water bars and dikes would be installed to minimize the problem. The proposed project should have minor impact on the surface water systems. The potential for pollution would be present from leaks or spills. The operator is required to report and clean-up all spills or leaks.

Ground Water Hydrology:

Some minor pollution of ground water systems would occur with the introduction of drilling fluids (filtrate) into the aquifer. This is normal and unavoidable during rotary drilling operations. The potential for communication, contamination and comingling of formations



via the well bore would be possible. The drilling program is designed to prevent this. There is need for more data on hydrologic systems in the area and the drilling of this well may provide some basic information as all shows of fresh water would be reported. Water production with the gas would require disposal of produced water per the requirements of NTL-2B. The depths of fresh water formations are listed in the 10-Point Subsurface Protection Plan. There would be no tangible effect on water migration in fresh water aquifers. The pits would be unlined. If fresh water should be available from the well, the owner or surface agency may request completion as a water well if given approval.

#### Vegetation:

Pinon-juniper, grasses, rabbit brush, snakeweed, cactus. Plants in the area are of the salt-desert-shrub types grading to the pinon-juniper association.

Proposed action would remove about 1 acre of vegetation. Removal of vegetation would increase the erosional potential and there would be a minor decrease in the amount of vegetation available for grazing.

The operator proposes to rehabilitate the surface upon completion of operations.

#### Wildlife:

Animal and plant inventory has been made by the BLM. No endangered plants or animals are known to habitat on the project area. The fauna of the area consists predominantly of mule deer, coyotes, rabbits, foxes, and varieties of small ground squirrels and other types of rodents and various types of raptiles. The area is used by man for the primary purpose of grazing domestic livestock and sheep. The birds of the area are raptors, finches, ground sparrows, magpies, crows, and jays.

#### Social-Economic Effect:

An on the ground surface archaeological reconnaissance would be required prior to approval of the proposed action. Appropriate clearances would then be obtained from the surface managing agency. If a historic artifact, an archaeological feature or site is discovered during construction operations; activity would cease until the extent, the scientific importance, and the method of mitigating the adverse effects could be determined by a qualified cultural resource specialist.

There are no occupied dwellings or other facilities of this nature in the general area. Minor distractions from aesthetics would occur over the lifetime of the project and is judged to be minor. All permanent

facilities placed on the location would be painted a color to blend in with the natural environment. Present use of the area is grazing, recreation, and oil and gas activities.

Noise from the drilling operation may temporarily disturb wildlife and people in the area. Noise levels would be moderately high during drilling and completion operations. Upon completion, noise levels would be infrequent and significantly less. If the area is abandoned, noise levels should return to pre-drilling levels.

The site is not visible from any major roads. After drilling operations, completion equipment would be visible to a passersby of the area but would not present a major intrusion.

The economic effect of one well would be difficult to determine. The overall effect of oil and gas drilling and production activity are significant in Grand County, Utah.

But should this well discover a significant new hydrocarbon source, local, state and possibly national economics might be improved. In this instance, other development wells would be anticipated, with substantially greater environmental and economic impacts.

Should the wellsite be abandoned, surface rehabilitation would be done according to the surface owner's requirements and to USGS's satisfaction. This would involve leveling, contouring, reseeding, etc., of the location and possibly the access road. If the well should produce hydrocarbons, measures would be undertaken to protect wildlife and domestic stock from the production equipment.

There are no national state, or local parks, forests, wildlife refuges or ranges, grasslands, monuments, trails or other formally designated recreational facilities near the proposed location.

The proposed location is within the Book Mountain Planning Unit 06-01. This Environmental Assessment Record was compiled by the Bureau of Land Management, the surface managing agency of the surrounding Federal surface in the area. The study includes additional information on the environmental impact of oil and gas operations in this area and gives land use recommendations. The E.A.R. is on file in the agency's State offices and is incorporated herein by reference.

#### Waste Disposal:

The mud and reserves pits would contain all fluids used during the drilling operations. A trash pit would be utilized for any solid wastes generated at the site and would be buried at the completion of the operations. Sewage would be handled according to State sanitary codes. For further information, see the 13-Point Surface Plan.

Alternative to the Proposed Action:1) Not Approving The Proposed Permit--The Oil and Gas Lease Grants The Lessee Exclusive Right To Drill For, Mine, Extract, Remove and Dispose Of All Oil And Gas Deposits.

Under leasing provisions, the Geological Survey has an obligation to allow mineral development if the environmental consequences are not too severe or irreversible. Upon rehabilitation of the site, the environmental effects of this action would be substantially mitigated, if not totally annulled. Permanent damage to the surface and sub-surface would be prevented as much as possible under U.S.G.S. and other controlling agencies supervision with rehabilitation planning reversing almost all effects. Additionally, the growing scarcity of oil and gas should be taken into consideration. Therefore, the alternative of not proceeding with the proposed action at this time is rejected.

2) Minor relocation of the wellsite and access road or any special, restrictive stipulations or modifications to the proposed program would not significantly reduce the environmental impact. There are no severe vegetative, animal or archaeological-historical-cultural conflicts at the site. Since only a minor impact on the environmental would be expected, the alternative of moving the location is rejected. At abandonment, normal rehabilitation of the area such as contouring, reseeding, etc., would be undertaken with an eventual return to the present status as outlined in the 13-Point Surface Plan.

Adverse Environmental Effects Which Cannot Be Avoided:

Surface disturbance and removal of vegetation from approximately 1 acre of land surface for the lifetime of the project which would result in increased and accelerated erosional potential. Grazing would be eliminated in the disturbed areas and there would be a minor and temporary disturbance of wildlife and livestock. Minor induced air pollution due to exhaust emissions from rig engines of support traffic engines would occur. Minor increase in dust pollution would occur due to vehicular traffic associated with the operation. If the well is a gas producer, additional surface disturbance would be required to install production pipelines. The potential for fires, leaks, spills or gas, oil or water would exist. During the construction and drilling phases of the project, noise levels would increase. Potential for sub-surface damage to fresh water aquifers and other geologic formations exists. Minor distractions from aesthetics during the lifetime of the project would exist. If the well is a producer, an irreplaceable and irretrievable commitment of resources would be made. Erosion from the site would eventually be carried as sediment in the Colorado River. The potential for pollution to the Westwater Creek would exist through leaks and spills.

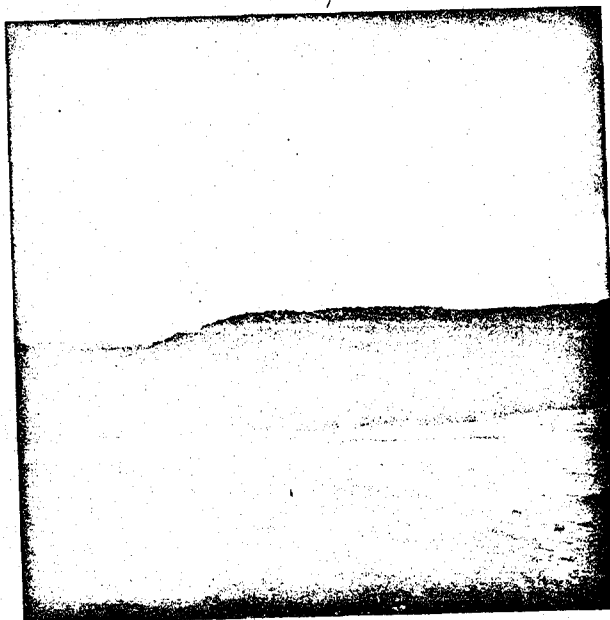
Determination:

This requested action ~~does~~/does not constitute a major Federal action significantly affecting the environment in the sense of NEPA, Sec. 102(2)(C).

Date

11/6/78

*E. W. [Signature]*  
 District Engineer  
 U.S. Geological Survey  
 Conservation Division  
 Oil and Gas Operations  
 Salt Lake City District



# PRELIMINARY COPY

CORE LABORATORIES, INC.  
Petroleum Reservoir Engineering  
DALLAS, TEXAS

PAGE NO. 1

THE ANSCHUTZ CORPORATION  
FEDERAL 258 NO. 1-A  
UNNAMED FIELD  
GRAND COUNTY

FORMATION : DAKOTA  
DRLG. FLUID: AIR-MIST  
LOCATION : NW SE SEC. 5-T18S-R24E  
STATE : UTAH

DATE : 12-19-78  
FILE NO. : RP-2-5765  
ANALYSTS : FD:RG:RM  
ELEVATION: 5218' KB

## CONVENTIONAL CORE ANALYSIS

SAMP.	DEPTH	PERM. TO HORZ.	AIR (MD) VERTICAL	POR. FLD.	FLUID SATS. OIL WATER	GR. DNS.	DESCRIPTION
1	3898-99	0.05	0.08	9.7	18.9 39.8		SD WH VFG CLY
2	3899 -0	0.10	0.08	11.4	16.2 30.6		SD WH VFG CLY
3	3900 -1	0.03	0.05	9.0	20.5 32.4		SD WH VFG CLY
4	3901 -2	0.03	0.04	7.7	15.3 51.0		SD WH VFG CLY
5	3902 -3	0.03	0.03	3.2	0.0 70.4		SD WH VFG CLY
6	3903 -4	0.11	0.14	11.7	20.5 34.4		SD WH VFG CLY
7	3904 -5	0.21	0.16	11.0	21.7 26.1		SD WH VFG CLY
8	3905 -6	0.14	0.13	10.4	19.5 27.8		SD WH VFG CLY
9	3906 -7	0.04	0.04	3.9	0.0 56.6		SD WH VFG CLY
10	3907 -8	0.13	0.11	12.3	16.4 45.2		SD WH VFG CLY
11	3908 -9	0.08	0.05	3.6	0.0 63.4		SD WH VFG CLY
12	3909-10	0.04	0.02	2.4	0.0 50.6		SD WH VFG CLY
	3910-3916						SHALE - NO ANALYSIS
	3916-3927						LOST CORE



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CORE LABORATORIES, INC.  
Petroleum Reservoir Engineering  
DALLAS, TEXAS

PAGE NO. 1

NARMCO, Inc.

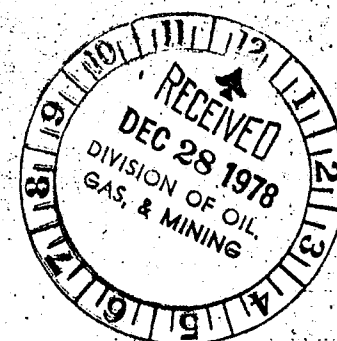
THE ANSCHUTZ CORPORATION  
FEDERAL 258 NO. 1-A  
UNNAMED FIELD  
GRAND COUNTY

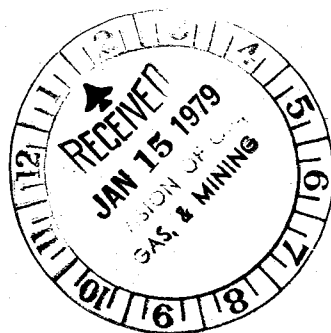
FORMATION : DAKOTA  
DRLG. FLUID: AIR-MIST  
LOCATION : NW SE SEC. 5-T18S-R24E  
STATE : UTAH

DATE : 12-19-78  
FILE NO. : RP-2-5765  
ANALYSTS : FD:RG:RM  
ELEVATION: 5218' KB

## CONVENTIONAL CORE ANALYSIS

SAMP.	DEPTH	PERM. TO HORZ.	AIR (MD) VERTICAL	POR. FLD.	FLUID SATS. OIL WATER	GR. DNS.	DESCRIPTION
1	3898-99	0.05	0.08	9.7	18.9 39.8		SD WH VFG CLY
2	3899 -0	0.10	0.08	11.4	16.2 30.6		SD WH VFG CLY
3	3900 -1	0.03	0.05	9.0	20.5 32.4		SD WH VFG CLY
4	3901 -2	0.03	0.04	7.7	15.3 51.0		SD WH VFG CLY
5	3902 -3	0.03	0.03	3.2	0.0 70.4		SD WH VFG CLY
6	3903 -4	0.11	0.14	11.7	20.5 34.4		SD WH VFG CLY
7	3904 -5	0.21	0.16	11.0	21.7 26.1		SD WH VFG CLY
8	3905 -6	0.14	0.13	10.4	19.5 27.8		SD WH VFG CLY
9	3906 -7	0.04	0.04	3.9	0.0 56.6		SD WH VFG CLY
10	3907 -8	0.13	0.11	12.3	16.4 45.2		SD WH VFG CLY
11	3908 -9	0.08	0.05	3.6	0.0 63.4		SD WH VFG CLY
12	3909-10	0.04	0.02	2.4	0.0 50.6		SD WH VFG CLY
	3910-3916						SHALE - NO ANALYSIS
	3916-3927						LOST CORE





CORE ANALYSIS RESULTS FOR

THE ANSCHUTZ CORPORATION

FEDERAL 258 NO. 1-A

UNNAMED FIELD

GRAND COUNTY, UTAH

**SCHLUMBERGER WELL SERVICES**

A DIVISION OF SCHLUMBERGER TECHNOLOGY CORPORATION  
HOUSTON, TEXAS 77001

12/27/78

PLEASE REPLY TO

SCHLUMBERGER WELL SERVICES  
1735 EAST 1500 SOUTH  
VERNAL, UTAH 84078

THE ANSCHUTZ CORPORATION  
555-17TH STREET SUITE 2400  
DENVER, COLORADO 80202  
Attention: G. SCHLICK

Gentlemen:

Enclosed are 4 prints of the DIL/SFL; CNL-FDC-GR on:  
Company ANSCHUTZ CORP.  
Well #6 FEDERAL 258 1A  
Field SPADAFORD County GRAND State UTAH

Additional prints are being sent to:

3 prints  
NARMCO  
P.O. BOX 283  
HOUSTON, TEXAS 77001  
ATTN: K. HAWKINS

1 prints  
FIV. OF OIL, GAS & MKNING  
1588 W. NORTH TEMPLE  
SALT LAKE CITY, UTAH 84116

1 prints  
NARMCO  
732 REPUBLIC BLDG.  
DENVER, COLORADO 80202  
ATTN: NEAL HARR

2 prints  
U.S. GEOLOGICAL SURVEY  
8426 FEDERAL BUILDING  
SALT LAKE CITY, UTAH 84138  
ATTN: MR. ED GUYNN

1 prints  
NICOR EXPLORATION  
P.O. BOX 948  
NAPERVILLE, ILL. 64540  
ATTN: B. ENQYIST

1 prints  
SCHLUMBERGER WELL SERVICE  
1735 EAST 1500 SOUTH  
VERNAL, UTAH 84078

1 prints  
NICOR EXPLORATION  
1658 COLE BLVD.  
GOLDEN, COLORADO 80401  
ATTN: B. COHN

       prints

The film is BEING SENT TO:

THE ANSCHUTZ CORPORATION  
555 17TH ST., SUITE 2400  
DENVER, COLORADO 80202  
ATTN: G. SCHLICK

We appreciate the privilege of serving you.

Very truly yours,  
SCHLUMBERGER WELL SERVICES

H. P. TILLY

DISTRICT MANAGER



COMPANY THE ANSCHUTZ CORPORATION FIELD UNNAMED FILE RP-2-5765  
WELL FEDERAL 258 NO. 1-A COUNTY GRAND DATE 12-19-78  
LOCATION NW SE SEC. 5-T18S-R24E STATE UTAH ELEV. 5218' KB

## CORE-GAMMA CORRELATION

These analyses, opinions or interpretations are based on observations and material supplied by the client to whom, and for whose exclusive and confidential use, this report is made. The interpretations or opinions expressed represent the best judgment of Core Laboratories, Inc. (all errors and omissions excepted), but Core Laboratories, Inc. and its officers and employees assume no responsibility and make no warranty or representations as to the productivity, proper operation, or profitability of any oil, gas or other mineral well or sand in connection with which such report is used or relied upon.

VERTICAL SCALE: 5" = 100'

## CORE-GAMMA SURFACE LOG

(PATENT APPLIED FOR)

## GAMMA RAY

RADIATION INCREASE →

## COREGRAPH

## TOTAL WATER

PERCENT TOTAL WATER

80 60 40 20 0

## PERMEABILITY

MILLIDARCY

100 50 10 .5 .1

## POROSITY

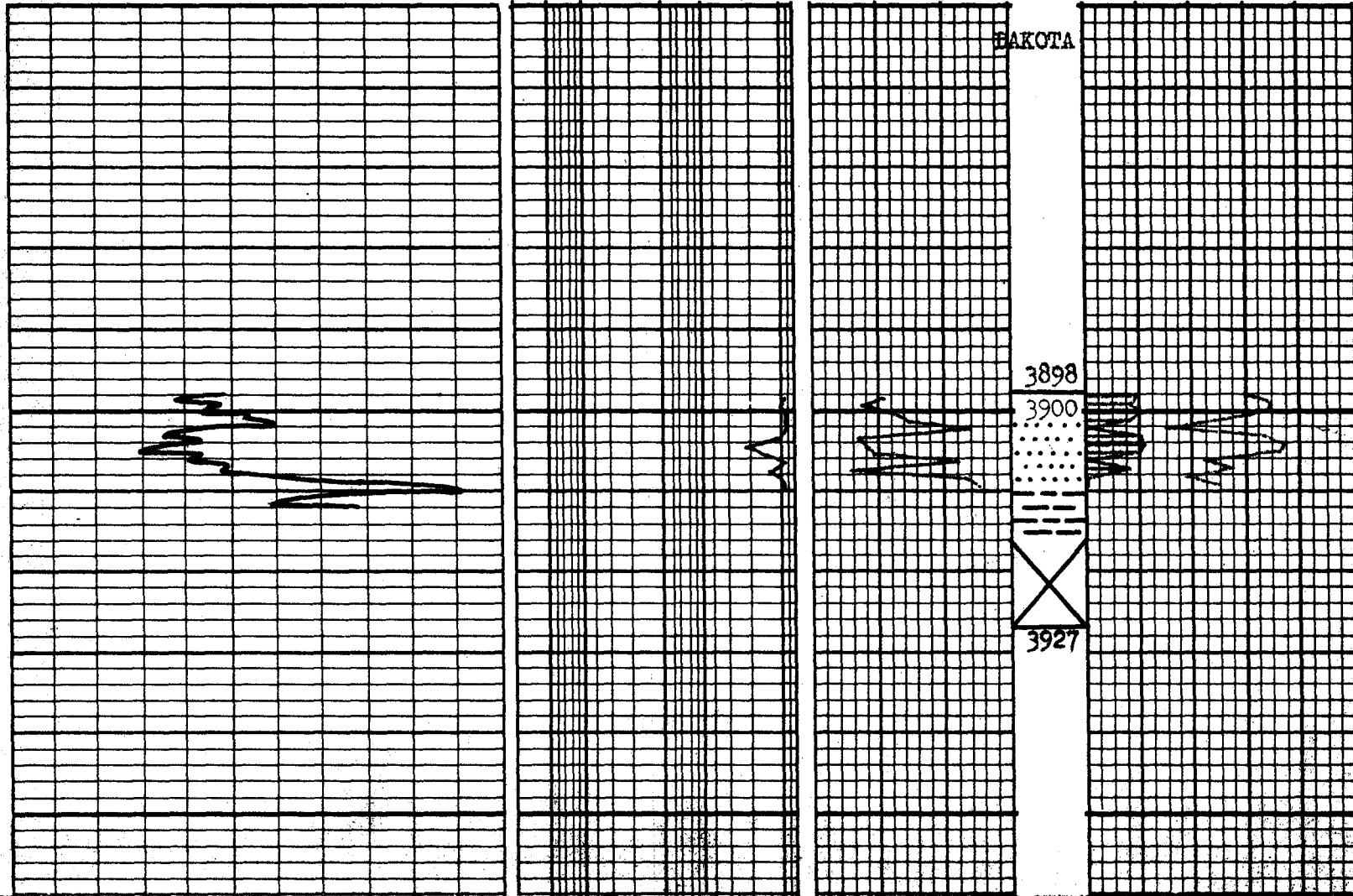
PERCENT

10 5 0

## OIL SATURATION

PERCENT PORE SPACE

0 20 40 60 80



CL-529

## CORE SUMMARY AND CALCULATED RECOVERABLE OIL

FORMATION NAME AND DEPTH INTERVAL: DAKOTA - 3898.0-3908.0 Feet

FEET OF CORE RECOVERED FROM ABOVE INTERVAL	10	AVERAGE TOTAL WATER SATURATION: PER CENT OF PORE SPACE	35.9
FEET OF CORE INCLUDED IN AVERAGES	8	AVERAGE CONNATE WATER SATURATION: PER CENT OF PORE SPACE	30 (e)
AVERAGE PERMEABILITY: MILLIDARCY	0.1	OIL GRAVITY: °API	38 (e)
PRODUCTIVE CAPACITY: MILLIDARCY-FEET	0.8	ORIGINAL SOLUTION GAS-OIL RATIO: CUBIC FEET PER BARREL	
AVERAGE POROSITY: PER CENT	10.4	ORIGINAL FORMATION VOLUME FACTOR: BARRELS SATURATED OIL PER BARREL STOCK-TANK OIL	1.30(e)
AVERAGE RESIDUAL OIL SATURATION: PER CENT OF PORE SPACE	18.3	CALCULATED ORIGINAL STOCK-TANK OIL IN PLACE: BARRELS PER ACRE-FOOT	434

Calculated maximum solution gas drive recovery is barrels per acre-foot, assuming production could be continued until reservoir pressure declined to zero psig. Calculated maximum water drive recovery is barrels per acre-foot, assuming full maintenance of original reservoir pressure, 100% areal and vertical coverage, and continuation of production to 100% water cut. (Please refer to footnotes for further discussion of recovery estimates.)

(c) Calculated (e) Estimated (m) Measured (\*) Refer to attached letter.

## INTERPRETATION OF DATA

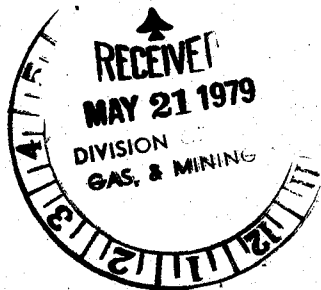
3898.0-3908.0 Feet - Interval is interpreted to have possibility of producing oil with high gas oil ratio, provided a favorable response to formation treatment is obtained.

These recovery estimates represent theoretical maximum values for solution gas and water drive. They assume that production is started at original reservoir pressure; i.e., no account is taken of production to date or of prior drainage to other areas. The effects of factors tending to reduce actual ultimate recovery, such as economic limits on oil production rates, gas-oil ratios, or water-oil ratios, have not been taken into account. Neither have factors been considered which may result in actual recovery intermediate between solution gas and complete water drive recoveries, such as gas cap expansion, gravity drainage, or partial water drive. Detailed predictions of ultimate oil recovery to specific abandonment conditions may be made in an engineering study in which consideration is given to overall reservoir characteristics and economic factors.

These analyses, opinions or interpretations are based on observations and materials supplied by the client to whom, and for whose exclusive and confidential use, this report is made. The interpretations or opinions expressed represent the best judgment of Core Laboratories, Inc. (all errors and omissions excepted); but Core Laboratories, Inc., and its officers and employees assume no responsibility and make no warranty or representation as to the productivity, proper operation, or profitability of any oil, gas or other mineral well or sand in connection with which such report is used or relied upon.



2400 ANACONDA TOWER  
555 SEVENTEENTH STREET  
DENVER, COLORADO 80202  
TELEPHONE 303-825-6100  
TWX 910-931-2620



May 18, 1979

Ed Guynn, District Engineer  
U. S. Geological Survey  
8426 Federal Bldg.  
125 S. State Street  
Salt Lake City, Utah 84138

Re: Federal 258 No. 1-A  
NW SE Sec. 5, T18S, R24E  
Grand County, Utah

Dear Mr. Guynn:

Enclosed please find two copies of our Completion Report  
(Form 9-330) on the subject well.

Sincerely,

Peter B. Doty  
Operations Coordinator

PBD:jp

cc: ✓ Cleon Feight

## WELL COMPLETION OR RECOMPLETION REPORT AND LOG\*

1a. TYPE OF WELL:

OIL WELL ☒

GAS WELL ☐

DRY ☐

Other ☐

b. TYPE OF COMPLETION:

NEW WELL ☒

WORK OVER ☐

DEEP-EN ☐

PLUG BACK ☐

DIFF. RESVR. ☐

Other ☐

2. NAME OF OPERATOR

THE ANSCHUTZ CORPORATION

3. ADDRESS OF OPERATOR

2400 Anaconda Tower, Denver, Co 80202

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)\*

At surface 1765' FEL 1709' FSL

At top prod. interval reported below

At total depth

14. PERMIT NO.

DATE ISSUED

15. DATE SPUN

16. DATE T.D. REACHED

17. DATE COMPL. (Ready to prod.)

18. ELEVATIONS (DF, REB, RT, GR, ETC.)\*

19. ELEV. CASINGHEAD

20. TOTAL DEPTH, MD & TVD

21. PLUG, BACK T.D., MD & TVD

22. IF MULTIPLE COMPL., HOW MANY\*

23. INTERVALS DRILLED BY

ROTARY TOOLS

CABLE TOOLS

24. PRODUCING INTERVAL(S), OF THIS COMPLETION--TOP, BOTTOM, NAME (MD AND TVD)\*

3902-3908 Dakota

25. WAS DIRECTIONAL SURVEY MADE

yes

26. TYPE ELECTRIC AND OTHER LOGS RUN

DIL, FDC - CNL

27. WAS WELL CORED

Yes

28. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
8-5/8"	24#	220	12-1/4	150 SX.	-0-
4-1/2"		4069	7-7/8"	250 X.	-0-

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
2-3/8	3913 KB	None

31. PERFORATION RECORD (Interval, size and number)

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
3902-08	678 Bbls. Gelled Acid 60,000 lbs sand

33.\* PRODUCTION

DATE FIRST PRODUCTION

2-8-79

PRODUCTION METHOD (Flowing, gas lift, pumping--size and type of pump)

Pumping

WELL STATUS (Producing or shut-in)

Producing

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL--BBL.	GAS--MCF.	WATER--BBL.	GAS-OIL RATIO
1-22-79	12.5			11		27*	

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL--BBL.	GAS--MCF.	WATER--BBL.	OIL GRAVITY-API (CORR.)
100	150		21		-0-	

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)

TEST WITNESSED BY

Burkhalter

35. LIST OF ATTACHMENTS

Geologic Report

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED

PETER B. DOTY

TITLE

Operations Coordinator

DATE

5-18-79

**\* (See Instructions and Spaces for Additional Data on Reverse Side)**

\* All load water

# INSTRUCTIONS

**General:** This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on items 22 and 24, and 33, below regarding separate reports for separate completions.

If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see item 35.

**Item 4:** If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

**Item 18:** Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments. **Items 22 and 24:** If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

**Item 29:** "Sacks Cement": Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.

**Item 33:** Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

## 37. SUMMARY OF POROUS ZONES:

SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF; CORED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	38. GEOLOGIC MARKERS		
				NAME	MEAS. DEPTH	TRUE VERT. DEPTH
Castlegate	100' Est	160 Est.	Wet	Mancos	160' Est	
Dakota	3896	3934	Oil	Dakota Silt	3780	
				Basl Dakota Silt	3842	
Cedar Mtn.	3934	4012	Wet	Morrison	4012	

THE ANSCHUTZ CORPORATION

FEDERAL 258 NO. 1-A

SECTION 5 - TOWNSHIP 18 SOUTH - RANGE 24 EAST

GRAND COUNTY, UTAH

SPADAFORÉ FIELD

GEOLOGIC REPORT

BY

A. WAYNE POWELL

DENVER, COLORADO

APRIL, 1979

# INDEX

	PAGE
GEOLOGIC SUMMARY . . . . .	1
SUMMARY OF WELL DATA . . . . .	2
FORMATION TOPS . . . . .	4
ELECTRIC LOGGING PROGRAM . . . . .	4
OIL AND GAS SHOWS . . . . .	5
CORE DESCRIPTION . . . . .	6
CORE ANALYSIS . . . . .	7
COMPLETION TESTS . . . . .	8
SUMMARY OF DAILY OPERATIONS . . . . .	9
HOLE DEVIATION RECORD. . . . .	11
BIT RECORD . . . . .	11
SAMPLE LOG . . . . .	Pocket

## GEOLOGIC SUMMARY

The Anschutz Federal 258 No. 1-A was drilled to 4075 feet in the Morrison to test the potential of the Dakota sandstone and to reevaluate the Cedar Mountain formation. It is a twin well to the Federal 258 No. 1, drilled in April 1977 into the Entrada sandstone. The No. 1 well tested a sandstone in the Salt Wash and was completed in the Dakota sandstone as a small oil well. Production fell off rapidly, and the decrease was thought to be caused by casing problems. However, it now appears that the lack of significant production for these wells results from low porosity and permeability to fluid and insufficient gas volume to provide a good gas drive. The current well is pumping less than 5 BOPD at the present time.

The Federal 258 wells are located structurally in an area of west-northwest dip of 5 to 6 degrees (Approx. 600 feet per mile). Minor faulting may assist in the trapping mechanics, however, the Dakota oil entrapment is believed to be stratigraphically controlled. This Dakota sandstone either terminates or becomes impermeable in an updip direction to the southeast, possibly within one mile or less. The current well is located approximately 100 feet east of the original well and is 18 feet structurally higher on top of the productive Dakota sand.

The Dakota sandstone was cored from 3898 to 3911 feet. Shows in the upper 8 feet consisted of light tan, spotted to even stain with fluorescence and a strong gassy-oil odor. The lower 5 feet of core had only a weak gassy odor, speckled fluorescence and no visible stain. Fractures were not apparent in the core and no oil or gas to the surface was encountered while cutting the core with air-mist. Although the core was obviously fairly tight, the core analysis and E-logs indicated potential production and hopefully a frac stimulation would improve production. The best porosity in the core ranged from 7.7 to 12.3% and averaged 10.4%. Permeabilities were all less than 0.21 Md.

The Dakota sandstone thins very rapidly from 20 feet in the original test to 16 feet in the current well. The thinning seems to be in the lower, tighter portion of the sand, thus thickness of reservoir quality sandstone was not greatly affected. Previous Dakota evaluation wells in this area are the Anschutz 258-3 drilled 1/4 mile northeast and the Anschutz 258-5 drilled 1/2 mile to the south. Both these offsets lacked porous sand in the Dakota. The Anschutz 258 No. 6 well was recently drill 3/8 mile to the southeast of the subject well. It has a significant sand thickness but the sand is apparently also too tight for sustained production. It was tested through casing with poor shows of oil and gas.

Although any further evaluation of this isolated Dakota sand body could hardly be recommended, the potential for improved reservoir sandstone in a west-northwest direction is still plausible. However, a test in the NW or SW Section 5 would be a downdip location and might result in higher water saturations rather than an increase in oil production.

SUMMARY OF WELL DATA

OPERATOR: The Anschutz Corporation

PARTNERS: NARMCO  
NICOR

WELL: Federal 258 No. 1-A.

LOCATION: 1765 FEL, 1709 FSL, NW SE Sec.5, T. 18 S, R. 24 E,  
Grand County, Utah. (Approx. 100 feet east of the  
258 No. 1 well).

ELEVATION: KB 5218 feet.  
GL 5208 feet.

FIELD: Spadafore Dakota.

DRLG. SUPERVISOR: Bill Cutler, Denver, Colorado.

CONTRACTOR: Pease Drilling Co. Rig No. 4  
Toolpusher - T. P. Stoker

SPUD DATE: December 5, 1978

T. D. DATE: December 20, 1978

COMPLETION DATE: April 23, 1979 -- pump testing well.

TOTAL DEPTH: 4075 feet in Morrison formation.  
4079 feet -- Log T. D.

STATUS: April 23, 1979 -- Pumping oil well, very low volume.

INITIAL POTENTIAL: April 1979 -- pumping 2 to 8 BOPD and fm. water.

HOLE SIZE & CASING: 

<u>Hole Size</u>	<u>Casing</u>
12 1/4" 0 - 220'	8 5/8" at 220' with 150 sacks.
7 7/8" 220 - 4075'	4 1/2" at 4069' with 250 sacks.

CORES: No. 1 Dakota 3898 - 3911 feet; Rec. 13 feet.  
No. 2 Dakota 3911 - 3927 feet; Rec. 5 feet.

TESTS: Open Hole Tests: None, no flow while drilling.  
Completion Test: Dakota, perfs - 3902 - 08.



## SUMMARY OF WELL DATA

LOGGING PROGRAM: Sample Log 220 to 4075 feet by A. W. Powell.  
Electric Logs 220 to 4075 feet by Schlumberger.

SAMPLE INTERVAL: 30 foot - 220 to 3700 feet.  
10 foot - 3700 to 3880 feet.  
5 foot - 3880 to 4075 feet.

CIRCULATE SAMPLES: 3880 feet - 10 min. (Drlg. with Air-mist)  
3885 feet - 10 min.  
3890 feet - 10 min.  
3896 feet - 10 min.  
3898 feet - 10 min.

SAMPLE CUTS &  
STORAGE: None; cores sent to Core Lab., Denver, Colorado.

MUD PROGRAM: 0 - 100 feet, drilled with Air.  
100 - 220 feet, drilled with mud, hole dry but had  
soft caving sand.  
220 - 260 feet, drilled with Air.  
260 - 3911 feet, drilled with Air-Mist.  
3911 - 4075 feet, drilled with Mud.

WATER ZONES: At 260 feet hole became wet in top Mancos.  
No significant water at 3911 feet, mudded up because  
of caving and tight hole conditions.

LOST CIRCULATION: 3911 feet, lost some mud uphole while converting to  
mud. No estimate of mud loss.

COMPLETION DATA: Set 4 1/2 inch casing at 4069 feet.  
Perf. Dakota 3902 - 08.  
Frac Treated with 678 Bbls. gelled acid and 60,000 lbs.  
sand.  
Swabbed well to recover load water.  
Installed pump and pump testing well at rate of 2 to 8  
BOPD with 4 to 28 BWPD.

FORMATION TOPS

<u>AGE</u>	<u>FORMATION</u>	<u>DEPTH</u>	<u>DATUM</u>	<u>INTERVAL THICKNESS</u>
CRETACEOUS	Castlegate SS.	100' Est.	+5118	60
	Mancos	160' Est.	+5058	3620
	Dakota Silt	3780	+1438	62
	Base Dakota Silt	3842	+1376	54
	Dakota SS.	3896	+1322	38
	Cedar Mountain	3934	+1284	78
JURASSIC	Morrison	4012	+1206	67
	Log. T. D.	4079		

ELECTRIC LOGGING PROGRAM

<u>COMPANY</u>	<u>TYPE LOG</u>	<u>FROM</u>	<u>TO</u>	<u>SCALE</u>
Schlumberger	Dual Induction	219	4073	2" & 5"
Schlumberger	FDC - CNL - GR	3200	4078	5"

## OIL AND GAS SHOWS

Show & Fm: Show No. 1, Dakota.

Depth: 3898 to 3911 feet.

Type Show: Core.

Lithology: 3898-3906' - Sandstone, grayish-tan, hard, vfg, sl. mic. & carb., clay & silt cement, non-calcareous.  
3906-3911' - Sandstone, white, hard to very hard, vfg, silty, few black shale partings, silt & clay cement, mod. calcareous. (See core description).

Porosity: 3898-3906' - Poor porosity.  
3906-3911' - Very poor porosity.

Core Show: 3898-3906' - Spotted to even light tan stain, fair gassy-oil odor, fair yellow-white spotted to even fluor. Fair cut.  
3906-3911' - No stain, weak gassy odor, very poor speckled fluor, no cut.

Gas Show: No oil or gas to surface while coring with air-mist.

Coring Time: 3898-3907 - 5 Min. per foot.  
3907-3911 - 7.5 Min. per foot.

Evaluation: 3898-3906' - Poor to fair show.  
3906-3911' - Very poor to trace of show.

(Also see Core Description and Core Analysis)

## CORE DESCRIPTION

CORE NO. 1 Dakota - 3898 - 3911. Cut & Rec. 13 feet.

- 3898-3903 (5') SS, gy-tn, hd, vfg, s-a, prt. s-rd, F. srtg, sl. mic, v. sl. carb, n-calcr, cly. & silt cem, sl. slty; ocas carb. inclus, v. p. por. Tr. lt. tn, spkl stn, Fair yell-wh spkl, flor, fair gassy-cond. odor; Fair yell-wh. cut. Poor show.
- 3903-3906 (3') SS, gy-tn, hd, vfg to fg, s.a. - s.rd, F. srtg, sl. carb, cly & slt cem, n-calcr; Pr. por; Pr spotted to even lt. tn stn, fair gassy-cond. odor, even yell-wh flor, fair-good yell-wh cut. Fair show.
- 3906-3911 (5') SS, wh - lt. gy, hd to v. hd, vfg, s.a, Fr. srtg, mod. slty, slt & cly cem, mod. calcr, sl. carb & w. few bk sh partings; V.P. por; no stn, wk gassy odor, v. pr. spkl flor. V.P. show.

Note: Core barrel length 30 feet, stopped coring at 3911 feet, while making a connection stuck barrel at 3884 feet and were unable to get back to bottom. Pulled short core and mudded up for Core No. 2.

CORE NO. 2 Dakota - 3911 - 3927. Cut 16 feet, Rec. 5 feet.

- 3911-3915 (4') Shale, bk, mod. soft, carb, sl. slty in part, non-calcareous. (Broken shale, mostly rubble, no positive fracturing). No show.
- 3915-3916 (1') Shale, bk to dark gray, mod. hard, sl. carb, mod. silty, non-calcareous. (Broken shale rubble). No show.

**CORE LABORATORIES, INC.**  
*Petroleum Reservoir Engineering*  
 DALLAS, TEXAS

PAGE NO. 1

1-15-79

THE ANSCHUTZ CORPORATION  
 FEDERAL 258 NO. 1-A  
 UNNAMED FIELD  
 GRAND COUNTY

FORMATION : DAKOTA  
 DRLG. FLUID: AIR-MIST  
 LOCATION : NW SE SEC. 5-T18S-R24E  
 STATE : UTAH

DATE : 12-19-78  
 FILE NO. : RP-2-5765  
 ANALYSTS : FD:RG:RM  
 ELEVATION: 5218' KB

CONVENTIONAL CORE ANALYSIS

AMP. O.	DEPTH	PERM. TO HORZ.	AIR (MD) VERTICAL	POR. FLD.	FLUID OIL	SATS. WATER	GR. DNS.	DESCRIPTION
1	3898-99	0.05	0.08	9.7	18.9	39.8		SD WH VFG CLY
2	3899 -0	0.10	0.08	11.4	16.2	30.6		SD WH VFG CLY
3	3900 -1	0.03	0.05	9.0	20.5	32.4		SD WH VFG CLY
4	3901 -2	0.03	0.04	7.7	15.3	51.0		SD WH VFG CLY
5	3902 -3	0.03	0.03	3.2	0.0	70.4		SD WH VFG CLY
6	3903 -4	0.11	0.14	11.7	20.5	34.4		SD WH VFG CLY
7	3904 -5	0.21	0.16	11.0	21.7	26.1		SD WH VFG CLY
8	3905 -6	0.14	0.13	10.4	19.5	27.8		SD WH VFG CLY
9	3906 -7	0.04	0.04	3.9	0.0	56.6		SD WH VFG CLY
10	3907 -8	0.13	0.11	12.3	16.4	45.2		SD WH VFG CLY
11	3908 -9	0.08	0.05	3.6	0.0	63.4		SD WH VFG CLY
12	3909-10	0.04	0.02	2.4	0.0	50.6		SD WH VFG CLY
	3910-3916							SD WH VFG CLY
	3916-3927							SHALE - NO ANALYSIS LOST CORE

CORE ANALYSIS

COMPLETION TEST NO. 1

Formation: Dakota

Perforations: 3902 - 3908 feet with 2 shots per foot.

Swabbed: Ran tubing to 3931 feet and swabbed 5 hours, recovered 300 feet water, no oil or gas.

Acid: Treated with 1500 gals. acid and methanol.  
I. R. 4 BPM at 2750 psi.  
ISIP - 1950 psi; 15 min. SIP 800 psi.

Swab after Acid: Swabbed 3 1/2 hours, recovered all of load acid, 3 to 4 foot gas flare between swab runs, no show of oil.

Frac Treatment: 678 Bbls. of 5% gelled acid and 60,000 lbs. sand.  
Ave. IR 9 BPM at 5000 psi pressure.  
ISIP 3300 psi.

Flow Test: Flowed to pits after frac, flowed 300 BLW and 10 Bbls. oil with good show of gas and died.

Swab Testing: 1st day - 20 BNO, 384 BLW recovered, lack 294 BLW.  
2nd day - 36 BNO, 470 BLW recovered, lack 208 BLW.  
3rd day - Rec. 11 BNO & 27 BLW in 9 hours, gas at 100 MCFD; 40 BNOR, 497 BLW recovered, lack 181 BLW.

Tubing: Cleaned out sand to PBD of 3977 feet, landed tubing at 3947 feet. Ran rods and pump.

Pump Tests: Pumped load water with trace of oil.  
4th day - Pumped 68 Bbls. fluid, 20% oil & 170 MCFD.  
6th day - Pumped 16 Bbls. fluid, 20% oil in 20 hours.  
8th day - Pumped 1 BNO and 40 BLW.  
10th day - Pumped 7 BO and 28 BW.

Two months, pump testing well.

April 20 - 23, 1979, pumping 2 to 8 BOPD with formation water.

# SUMMARY OF DAILY OPERATIONS

<u>Date</u>	<u>Depth</u>	<u>Operation</u>
Dec. 1978		
5	0'	Spud well at 11:00 a.m.
6	220'	Preparing to run surface casing. Drilled with air to 100 feet and had to mud up because of soft caving sand. No water.
7	220'	Nipple up and drilling rat hole. Set 8 5/8 inch at 220 feet with 150 sacks.
8	380'	Drilling with air-mist. Hole became wet at 260 feet & converted to mist.
9	475'	Drilling with air-mist.
10	1037'	Trip in hole with new bit.
11	1680'	Drilling with air-mist.
12	2780'	Drilling with air-mist.
13	3600'	Drilling with air-mist.
14	3898'	Trip out for core barrel.
15	3911'	Stuck at 3884 feet with core & core barrel. Cored 3898 - 3911 feet with air-mist, no show of oil or gas to surface, made connection and could not get to bottom. Stuck core barrel at bit, no circulation.
16	3911'	Converting to mud; pulled core barrel loose and trip out with Core No. 1, recovered 13 feet of core. Trip in hole with bit to clean out, could not work last 5 feet to bottom, pulled 10 stands and started mudding up.
17	3911'	Circulating and conditioning hole with mud, working pipe last 20 feet to bottom.
18	3911'	Trip out of hole to run core barrel.
19	3927'	Trip in hole with bit; Core No. 2 3911-3927 feet, core barrel jammed, recovered 5 feet of core.
20	4075'	Trip out of hole for logs.
21	4075'	Finished running logs and trip in hole to condition for casing.
22	4075'	Ran 4 1/2 inch casing, set at 4069 feet with 250 sacks, released rig.
Jan. 1979		
4	4075'	Ran Bond Log & CCL log. Top cement at 3600 feet. Poor bond 3876-93 feet, good bond across Dakota sand zone.
10	4075'	Rig up completion tools.
12	3965' PBD.	Perfed 3902-08 feet, ran tubing to 3931 feet, swabbed 5 hours & recovered 300 feet water, no show of oil or gas.

# SUMMARY OF DAILY OPERATIONS

<u>Date</u>	<u>Depth</u>	<u>Operation</u>
13	3965' PBD	Acidized and swabbed back acid, 3 - 4 foot gas flare between swab runs, no show of oil, rec. all load acid.
14 - 17	3965' PBD	Hauling water & prep. to frac well, set Baker packer at 3736 feet.
18	3965' PBD	Frac with 60,000 lbs. sand & gelled acid, flowed well & rec. 300 BLW & 10 Bbls. oil with good show of gas, well died, prep to retrieve packer & swab test.
19 - 22	3965' PBD	Swabbing well, rec. 36 Bbls. oil, 470 BLW, lack 208 BLW.
23	3965' PBD	Swabbed 9 hours, rec. 11 Bbls. oil, 27 BLW, gas at 100 MCFD, fluid at 3700 feet; Total new oil 40 bbls., total load water 497 bbls; 181 bbls. load to recover.
24	3975' PBD	Sand pumping, tagged sand fill at 3917 feet, cleaned out to 3932 feet.
25	3975' PBD	Pumped out sand to 3975 feet - PBD.
26	3977' PBD	Landed tubing at 3947 feet, ran rods and pump.
1-27 to 2-5		Move off completion tools, build pod, set pumping unit and lay flowline.

Feb. 1979

6		Pumped up at 1200. Making load water with trace of oil.
7		Pumped up at 1200, making load water and trace of oil.
8		Pumped 60 BLW with trace of oil and gas.
9		Pumped 68 bbls. fluid, 20% oil, 80% water with 170 MCFGPD.
10		Pumped 30 BLW and 10 BO in 15 hours.
11 - 13		No report.
14		Pumped 16 Bbls. fluid, 20% oil in 20 hours.
15		No report.
16		Pumped 5 BO and 35 BLW.
17		Pumped 1 BO and 40 BLW.
23		Pumped 7 BO and 28 BWP.
24 - 28		No report.

April 23, 1979 pump testing well, pumped 2 BO & 4 BWP.



### HOLE DEVIATION RECORD

<u>Depth</u>	<u>Deviation in Degrees</u>
220'	1
601'	1 3/4
975'	2 1/2
1308'	3 1/4
1565'	3
1750'	3
2248'	3
2685'	3 3/4
2870'	3 3/4
3394'	4
4075'	3 1/2

### BIT RECORD

<u>No.</u>	<u>Size</u>	<u>Company</u>	<u>Type</u>	<u>In</u>	<u>Out</u>	<u>Footage</u>	<u>Hours</u>
1	12 1/4"	Reed	Y-11 (RR)	0	220	220	-
2	7 7/8"	Reed	Y-21	220	1037	817	39
3	7 7/8"	Reed	FP 54	1037	3898	2861	79
4	7 7/8"	Christenson	MC 20 (core)	3898	3927	29	10
5	7 7/8"	Reed	FP 54	3927	4075	148	19



SCOTT M. MATHESON  
Governor

GORDON E. HARMSTON  
Executive Director,  
NATURAL RESOURCES

CLEON B. FEIGHT  
Director

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS, AND MINING  
1588 West North Temple  
Salt Lake City, Utah 84116  
(801) 533-5771

OIL, GAS, AND MINING BOARD

I. DANIEL STEWART  
Chairman

CHARLES R. HENDERSON  
JOHN L. BELL  
THADIS W. BOX  
C. RAY JUVELIN

June 5, 1979

Anschutz Corporation  
2400 Anaconda Tower  
Denver, Colorado 80202

Re: Well No. Federal 258-1A  
Sec. 5, T. 18S, R. 24E,  
Grand County, Utah

6-11-79 Talked w/ Pete Doudy (Ans); he had  
not received his copies from Schlum.  
yet; was still waiting on them—  
Gentlemen:

According to our records, a "Well Completion Report" filed  
with this office 5-18-79 from above referred to well(s)  
indicates the following electric logs were run: DIL, FDC-CNL

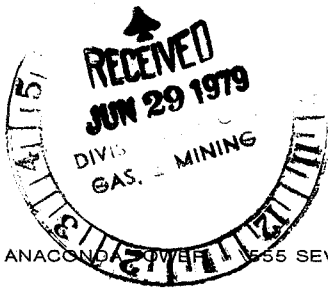
Rule C-5, General Rules and Regulations and Rules of Practice  
and Procedure, requires that a well log shall be filed with the  
Commission together with a copy of the electric and radioactivity  
logs.

Your prompt attention to the above will be greatly appreciated.

Sincerely,

DIVISION OF OIL, GAS & MINING

*Kathy Ostler*  
KATHY OSTLER  
RECORDS CLERK



2400 ANACONDA TOWER • 1555 SEVENTEENTH STREET • DENVER, COLORADO 80202 • 303-825-6100 • TWX 910-931-2620

June 27, 1979

Mrs. Kathy Avilla  
State of Utah  
Department of Natural Resources  
Division of Oil, Gas and Mining  
1588 West North Temple  
Salt Lake City, Utah 84116

Dear Kathy,

We are in receipt of your letter dated June 5, 1979, requesting copies of the electric logs run on the Federal 258 No. 1-A well located in the SESE Section 5, T18S, R24E, Grand County, Utah.

After much searching, we have managed to locate the log films and are having copies made for you. In our search, we also found the distribution list, which indicated that you were sent a copy of the final prints on 12/27/78. I assume that they were lost in the heavy Christmas mails. If you find you need additional copies, please let me know.

Sincerely,

  
Peter B. Doty

PBD/eg



2400 ANACOSTA TOWER • 555 SEVENTEENTH STREET • DENVER, COLORADO 80202 • 303-825-6100 • TWX 910-931-2620

August 3, 1979

Mr. Cleon Feight, Director  
Utah Division of Oil, Gas & Mining  
1588 West, North Temple  
Salt Lake City, Utah 84116

Dear Jack,

This is to inform you that we have recently sold all of our interests in the South Flank of the Unita Basin and have turned operations of the following producing properties in Grand County to Narmco, Inc.:

<u>Lease</u>	<u>Well</u>	<u>Location</u>
9 Federal 258	1-A	Sec. 5 T18S, R24E , 30469
Federal 258	2	Sec. 5 T18S, R24E
Federal 258	6	Sec. 5 T18S, R24E
Federal 675	1	Sec. 10 T20S, R21E
Federal 104	1	Sec. 4 T20S, R21E
Federal 769	2	Sec. 33 T19S, R21E
USA 4970	1	Sec. 4 T20S, R21E

Should any information be required on the above wells or any others which we operated in Grand County, I suggest you contact:

Narmco, Inc.                      Attn: Paul Hughes  
P.O. Box 283  
Houston, Texas 77001

If I can be of any further assistance please give me a call.

Sincerely,

  
Peter B. Doty  
Operations Coordinator

PBD/bv

cc: Ed Guynn, USGS, SLC  
Jean Laws, USGS, Casper  
Jane Henry, USGS, Casper  
Mr. Gail Prince, Utah Division of Lands

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

Form 9-329 Rev. Feb 76  
OMB 42-R0356

MONTHLY REPORT  
OF  
OPERATIONS

Lease No. 71-0148

Communitization Agreement No. \_\_\_\_\_  
Field Name Un-Named  
Unit Name NA  
Participating Area NA  
County Grand State Utah  
Operator Texoma Production Company\*  
\*Formerly Narmco, Inc. (Del.)  
☐ Amended Report

The following is a correct report of operations and production (including status of all unplugged wells) for the month of  
October, 1979

(See Reverse of Form for Instructions)

This report is required by law (30 U.S.C. 189, 30 U.S.C. 359, 25 U.S.C. 396 d), regulation (30 CFR 221.60), and the terms of the lease. Failure to report can result in the assessment of liquidated damages (30 CFR 221.54 (j)), shutting down operations, or basis for recommendation to cancel the lease and forfeit the bond (30 CFR 221.53).

Well No.	Sec. & 1/4 of 1/4	TWP	RNG	Well Status	Days Prod.	*Barrels of Oil	*MCF of Gas	*Barrels of Water	Remarks
2	NE SE								
258-1-A	Sec 5	18S	24E	POW	30	557	30	-0-	
	NW SE								
	Sec 5	18S	24E	OSI	-0-	-0-	-0-	-0-	
Cumulative # 2						11,376	2,198		
#1A						276	200	220	
Cumulative Both Wells						11,652	2,398	292	

\*If none, so state.

Disposition of production (Lease, Participating Area, or Communitized Area basis)

	Oil & Condensate (BBLs)	Gas (MCF)	Water (BBLs)
*On hand, Start of Month	444	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX
*Produced	557	30	
*Sold	-0-	-0-	XXXXXXXXXXXXXXXXXXXX
*Spilled or Lost	-0-	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX
*Flared or Vented	XXXXXXXXXXXXXXXXXXXX	30	XXXXXXXXXXXXXXXXXXXX
*Used on Lease	-0-	-0-	XXXXXXXXXXXXXXXXXXXX
*Injected	-0-	-0-	
*Surface Pits	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX	
*Other (Identify)	-0-	-0-	
*On hand, End of Month	1,001	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX
*API Gravity/BTU Content		-0-	XXXXXXXXXXXXXXXXXXXX

Authorized Signature: Sharon Koudelka

Address: P.O. Box 283 Houston, Texas

Title: Production Coordinator

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

**SUNDRY NOTICES AND REPORTS ON WELLS**

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9-331-C for such proposals.)

1. oil ☒ well ☐ gas well ☐ other
2. NAME OF OPERATOR  
Texoma Production Co.
3. ADDRESS OF OPERATOR  
P.O. Box 90996, Houston, Tx 77090
4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.)  
AT SURFACE:  
AT TOP PROD. INTERVAL:  
AT TOTAL DEPTH:
16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

- | REQUEST FOR APPROVAL TO:                      | SUBSEQUENT REPORT OF:    |
|---|--------------------------|
| TEST WATER SHUT-OFF <input type="checkbox"/>  | <input type="checkbox"/> |
| FRACTURE TREAT <input type="checkbox"/>       | <input type="checkbox"/> |
| SHOOT OR ACIDIZE <input type="checkbox"/>     | <input type="checkbox"/> |
| REPAIR WELL <input type="checkbox"/>          | <input type="checkbox"/> |
| PULL OR ALTER CASING <input type="checkbox"/> | <input type="checkbox"/> |
| MULTIPLE COMPLETE <input type="checkbox"/>    | <input type="checkbox"/> |
| CHANGE ZONES <input type="checkbox"/>         | <input type="checkbox"/> |
| ABANDON* <input type="checkbox"/>             | <input type="checkbox"/> |
| (other) <u>Change of operator</u>             |                          |

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

New operator effective 4/1/81:

Buckhorn Petroleum Co.  
P. O. Box 5928 T.A.  
1625 Broadway, Ste. 1200  
Denver, Colo. 80217

5. LEASE  
71-014258
6. IF INDIAN, ALLOTTEE OR TRIBE NAME  
n/a
7. UNIT AGREEMENT NAME  
n/a
8. FARM OR LEASE NAME  
Federal
9. WELL NO.  
258-1A
10. FIELD OR WILDCAT NAME  
Wildcat
11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA  
NWSE Sec. 5, 18S-24E
12. COUNTY OR PARISH  
Grand
13. STATE  
Utah
14. API NO.
15. ELEVATIONS (SHOW DF, KDB, AND WD)

(NOTE: Report results of multiple completion or zone change on Form 9-330.)

Subsurface Safety Valve: Manu. and Type \_\_\_\_\_ Set @ \_\_\_\_\_ Ft.

18. I hereby certify that the foregoing is true and correct

SIGNED Craig J. Dickell TITLE Chief Prod. Stat. DATE May 12, 1981

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_  
CONDITIONS OF APPROVAL, IF ANY:

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use Form 9-331-C for such proposals.)

1. oil ☒ well gas ☐ well other ☐
2. NAME OF OPERATOR  
BUCKHORN PETROLEUM CO.
3. ADDRESS OF OPERATOR  
P. O. Box 5928 T.A.; Denver, CO 80217
4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.) 1709' FSL & 1765' FEL (NW SE) 5-18S-24E  
AT SURFACE: Grand County, Utah  
AT TOP PROD. INTERVAL: Approx. Same  
AT TOTAL DEPTH: Approx. Same
16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

- REQUEST FOR APPROVAL TO: SUBSEQUENT REPORT OF:
- |                            |                          |                          |
|----------------------------|--------------------------|--------------------------|
| TEST WATER SHUT-OFF        | <input type="checkbox"/> | <input type="checkbox"/> |
| FRACTURE TREAT             | <input type="checkbox"/> | <input type="checkbox"/> |
| SHOOT OR ACIDIZE           | <input type="checkbox"/> | <input type="checkbox"/> |
| REPAIR WELL                | <input type="checkbox"/> | <input type="checkbox"/> |
| PULL OR ALTER CASING       | <input type="checkbox"/> | <input type="checkbox"/> |
| MULTIPLE COMPLETE          | <input type="checkbox"/> | <input type="checkbox"/> |
| CHANGE ZONES               | <input type="checkbox"/> | <input type="checkbox"/> |
| ABANDON*                   | <input type="checkbox"/> | <input type="checkbox"/> |
| (other) Change of Operator |                          |                          |

5. LEASE  
U-014258
6. IF INDIAN, ALLOTTEE OR TRIBE NAME  
---
7. UNIT AGREEMENT NAME  
---
8. FARM OR LEASE NAME  
FEDERAL 258
9. WELL NO.  
1-A
10. FIELD OR WILDCAT NAME  
Unnamed (Cisco ?)
11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA NW $\frac{1}{4}$  SE $\frac{1}{4}$   
Sec. 5-T18S-R24E .
12. COUNTY OR PARISH  
Grand
13. STATE  
Utah
14. API NO.  
43-019-30469 10-16-78
15. ELEVATIONS (SHOW DF, KDB, AND WD)  
5208' GL; 5218' KB

(NOTE: Report results of multiple completion or zone change on Form 9-330.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

Effective 12:01 am 11-1-82 Buckhorn Petroleum Co. has sold its interest in the subject well and lease, and relinquished operations thereof to:

MR. WILLIAM BUSH  
c/o Frontier Drilling  
619 Viewpoint Drive  
Grand Junction, CO 81501  
Phone: 303/243-0493

By copy of this notice, we are hereby advising Mr. Bush of his responsibility to post the appropriate bond and to fulfill all obligations of Operator in accordance with the rules and regulations of the local, state, and federal governing bodies.

Subsurface Safety Valve: Manu. and Type \_\_\_\_\_ Set @ \_\_\_\_\_ Ft.

18. I hereby certify that the foregoing is true and correct

SIGNED Mark E. Weems TITLE Production Engr. DATE November 12, 1982

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_  
CONDITIONS OF APPROVAL, IF ANY:

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

## SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen different reservoir. Use Form 9-331-C for such proposals.)

1. oil well <input checked="" type="checkbox"/> gas well <input type="checkbox"/> other <input type="checkbox"/>	Dry
2. NAME OF OPERATOR William G. Bush	
3. ADDRESS OF OPERATOR 619 Viewpoint Dr. Grand Jct., Co. 81506	
4. LOCATION OF WELL (REPORT LOCATION CLEARLY. See space 17 below.) 5-18S-24E AT SURFACE: 1765' FEL & 1709' FSL (NW SE) AT TOP PROD. INTERVAL: Same AT TOTAL DEPTH: Same	
16. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA	

REQUEST FOR APPROVAL TO:	SUBSEQUENT REPORT OF:
TEST WATER SHUT-OFF <input type="checkbox"/>	<input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	<input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	<input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	<input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	<input type="checkbox"/>
MULTIPLE COMPLETE <input type="checkbox"/>	<input type="checkbox"/>
CHANGE ZONES <input type="checkbox"/>	<input type="checkbox"/>
ABANDON* <input checked="" type="checkbox"/>	<input type="checkbox"/>
(other) <input type="checkbox"/>	<input type="checkbox"/>

5. LEASE U-14258	POW
6. IF INDIAN, ALLOTTEE OR TRIBE NAME	
7. UNIT AGREEMENT NAME	
8. FARM OR LEASE NAME U.S.A.	051410
9. WELL NO. 258-1A	
10. FIELD OR WILDCAT NAME Bushy	
11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Section 5 T18S - R24E SIM	
12. COUNTY OR PARISH Grand	13. STATE Utah
14. API NO. 43-019-30469	
15. ELEVATIONS (SHOW DF, KDB, AND WD) 5208 ft. GL	

(NOTE: Report results of multiple completion or zone change on Form 9-330.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

I will plug the well by pumping 35 sacks of cement through the tubing covering a zone from 3850 ft. to 4075 ft. The well is cased from surface to 4075 ft. with 4½" (11.6#) casing. The casing is perforated from 3902' to 3908 ft. I will set a plug at surface with 10 sacks covering a zone from 120 ft. to surface and install Dry Hole Marker.

Surface around well location will be leveled and seeded.

Casing will not be pulled.

Subsurface Safety Valve: Manu. and Type \_\_\_\_\_ Set @ \_\_\_\_\_ Ft.

18. I hereby certify that the foregoing is true and correct

SIGNED William G. Bush TITLE Operator DATE Feb. 3, 1987

(This space for Federal or State office use)

APPROVED BY Kevin V. Huer TITLE Acting District Eng. DATE 2/19/87

CONDITIONS OF APPROVAL, IF ANY:

CONDITIONS OF APPROVAL ATTACHED

ACCEPTED BY THE STATE  
OF UTAH DIVISION OF  
OIL, GAS, AND MININGDATE: 5-12-87  
BY: John R. Bay

\*See Instructions on Reverse Side

RATOR



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEYSUBMIT IN TRIPLICATE  
(Other instructions on re-  
verse side)Form approved.  
Budget Bureau No. 43-B1424.

10

## SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir.  
Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input checked="" type="checkbox"/> Dry Hole		5. LEASE DESIGNATION AND SERIAL NO. U-14258	
2. NAME OF OPERATOR William G. Bush		6. IF INDIAN, ALLOTTEE OR TRIBE NAME 051914	
3. ADDRESS OF OPERATOR 619 Viewpoint Drive Grand Junction, Co. 81506		7. UNIT AGREEMENT NAME	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.) At surface 5-18S-24E 1765' FEL & 1709' FSL (NW SE)		8. FARM OR LEASE NAME USA	
14. PERMIT NO. 43-019-30469		9. WELL NO. 258-1A	
15. ELEVATIONS (Show whether DF, RT, OR, etc.) 5208' GL		10. FIELD AND POOL, OR WILDCAT Bushy	
		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA Sec. 5 T18S - R24E SLM	
		12. COUNTY OR PARISH Grand	13. STATE Utah

## Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

## NOTICE OF INTENTION TO:

## SUBSEQUENT REPORT OF:

TEST WATER SHUT-OFF <input type="checkbox"/>	PULL OR ALTER CASING <input type="checkbox"/>
FRACTURE TREAT <input type="checkbox"/>	MULTIPLE COMPLETE <input type="checkbox"/>
SHOOT OR ACIDIZE <input type="checkbox"/>	ABANDON* <input type="checkbox"/>
REPAIR WELL <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>
(Other) <input type="checkbox"/>	

WATER SHUT-OFF <input type="checkbox"/>	REPAIRING WELL <input type="checkbox"/>
FRACTURE TREATMENT <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
SHOOTING OR ACIDIZING <input type="checkbox"/>	ABANDONMENT* <input checked="" type="checkbox"/>
(Other) <input type="checkbox"/>	

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)\*

I plugged the well by pumping 35 sacks covering a zone from 3838 ft. to 4075 ft. The well is cased from surface to 4075 ft. with 4½" casing & perforated from 3902 to 3908 ft. Plug was tagged @ 3838 ft.

Surface plug was set from surface to 120 ft. with 10 sacks of cement & Hole Marker installed.

Surface around well will be leveled & seeded.  
No casing was pulled from the well.

RECEIVED  
MAY 18 1987DIVISION OF  
OIL, GAS & MINING

18. I hereby certify that the foregoing is true and correct

SIGNED William G. BushTITLE OperatorDATE May 15, 1987

(This space for Federal or State office use)

APPROVED BY \_\_\_\_\_  
CONDITIONS OF APPROVAL, IF ANY:

TITLE \_\_\_\_\_

ACCEPTED BY THE STATE  
OF UTAH DIVISION OF  
OIL, GAS, AND MINING

\*See Instructions on Reverse Side

DATE: 5-19-87BY: John R. Bay

Division of Oil, Gas and Mining  
PHONE CONVERSATION DOCUMENTATION FORM

Route original/copy to:

☒ Well File Bush 1A Fed 258 ☐ Suspense ☐ Other

(Location) Sec 5 Twp 18 Rng 4E  
(API No.) 43-019-3046.9

(Return Date) \_\_\_\_\_  
(To - Initials) \_\_\_\_\_

1. Date of Phone Call: 2-22-90 Time: 11:48 AM

2. DOGM Employee (name) Chris Kierst (Initiated Call ☒  
Talked to:

Name Date Manchester (Initiated Call ☐ - Phone No. (    ) 259-6111  
of (Company/Organization) BLM (Moab)

3. Topic of Conversation: Was P+A accepted by BLM for this well?

4. Highlights of Conversation: Must get back to me -  
2/23/90 Talked w/ Teresa Thompson @ BLM (SLC)  
and she said that FAN for this well was not  
approved yet (or at least she didn't have a  
copy yet) so it was probably not approved  
yet & this well should be inspected unless we get  
an approved FAN from BLM prior to the  
inspection.